

# Bowditch Athletic Complex Renovation Project Master Plan

Framingham, MA  
April 24, 2007

KAESTLE BOOS  
associates, inc







# Town of Framingham

## Parks & Recreation Department

475 Union Avenue  
Framingham, MA 01702

Robert L. Merusi  
Director of Parks and Recreation

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April 23, 2007

Dear Town Officials, Town Meeting Members, and Framingham Residents:

I am pleased to provide the attached Bowditch Field Master Plan. In June of 2005, Town meeting authorized \$450,000 to develop this master plan and construction specifications toward a phase 1 construction project.

The plan was developed with a wide variety of input, public meetings, identified options, and public review and feedback on those options. As with any good master plan, the plan is a fluid document and can be revised as the circumstances and public environment changes. The suggested construction phases are also adaptable. The requested phase 1 construction figure can be completed most economically under the Town's favorable bond rating that the Town now enjoys.

Finally, any desirable and healthy community enjoys responsible balance of basic services. The Board of Selectmen has developed a vision statement that reflects this. Bowditch Field has long played an important role in creating a positive identity for our community. If this plan is followed in whole or in part, the overall funding provided for park and recreation type services still remain well below comparable communities and is a responsible allocation of available funds.

Sincerely,

Robert L. Merusi  
Director





# **Board of Selectmen**

## **Vision Statement**

Our Town will become recognized as a leader among municipalities across the state in being responsive to the challenges of the 21st century and a wonderful place to live, play, work and to do business. Our Town will have a strong sense of community with vibrant unique neighborhoods, where participation is encouraged, an open and communicative government is promoted, diversity is cherished, human differences are respected, elderly concerns are recognized, and being socially responsible without overburdening our town's finite resources. Our Town shall strive to assure a sense of security by providing excellent public safety and public works, strong financial health, a well managed town government with long range planning and one that encourages a healthy business sector. Our Town will foster a sense of pride by placing a high priority on quality education, neighborhood parks, arts and culture and its library system, and one that values and promotes a clean and beautiful town.



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## PROJECT TEAM

### TOWN OF FRAMINGHAM PARKS & RECREATION COMMISSION:

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Mark J. Goldman	Robert L. Brown	

### TOWN OF FRAMINGHAM PARKS AND RECREATION DEPARTMENT

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*William D. Carey Memorial*

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*Aerial Photo of Site circa 2006*





## INTRODUCTION

### History of the Complex

Bowditch Field began serving Framingham in 1869 as the Town's "Fair Ground." The Town purchased the property from the Middlesex South Agricultural Society in 1917 and built the first athletic field on this location in 1922. The concrete stadium now standing was built as a WPA project in 1935 with a seating capacity of approximately 5,130, including the end zone grand stands that were reused at this site in the early 1960s when the old Boston Braves Stadium was torn down. During the 1960s, Bowditch Field housed many football events that drew as many as 7,000 spectators. In recent years, the crowds have been less intense, but the use of the stadium has been diversified to support a wider variety of community events such as music concerts, men's and women's professional soccer matches, and high school football, soccer, lacrosse, and track. The field is used occasionally by youth sport organizations that warrant a larger seating capacity. It is the only facility in Framingham that can accommodate the high school graduation that has as many as 4,500 attendees. The stadium has also been made available for unique events such as the Statewide School Marching Bands. This past year over 50 events occurred at the stadium, making it an important part of the local and school community.

### Master Plan Background

Approximately 10 years ago, limited attempts were made to preserve the home side grandstands and expand the press box. As part of the department's long-range capital plan, seven individual improvement projects related to the Bowditch Field Complex were identified but not funded. These projects were estimated to cost between 4.5 and 5 million dollars in total, and collectively, they are the original projects driving the current Master Plan outlined in this document. The original seven projects were:

- Concrete Grandstand Refurbishment
- End Zone Bleacher Replacement
- Accessible Locker Rooms and Public Bathrooms
- Maintenance Facility and Garage
- Driveway and Parking Lot Improvements
- Streetscape Design and Improvements at Union Avenue
- Handicapped Accessible Baseball Field Bleachers



Existing Visitor Grandstand

In the Fall of 2004, the Parks and Recreation Department had extensive engineering tests completed on the home and visitors side concrete grandstands due to an obvious and advanced state of deterioration. The Engineering Report cited major deficiencies and a high cost of repair. In part it stated:

*"A potentially serious hazard exists at the parapet at the top of the grandstands, spectators should be kept away from the parapet to avoid large numbers leaning against it. A failure of the parapet would result in both loss of protection for spectators and also a heavy piece of concrete could fall 20 feet to the ground."* (see Appendix for engineering report by Structural Integrity Group that was provided to Town Meeting).

In response to the report, the Park and Recreation Department obtained quotes to tear down and replace the structures in lieu of the repairs. At the time, the cost of replacing the grandstands was estimated to be \$300,000 less than the repairs. During the annual Town Meeting of 2005 the seven projects were presented and debated. It was decided that a master planning/design planning phase was needed to properly address and fund the seven highly interrelated projects at Bowditch Field. The objectives were to develop a Master Plan with a phased funding approach, and detailed construction plans, and specifications for Phase 1 improvements.

The following is a recap of the Town Meeting debate, considerations, and actions:



*Existing Visitor Grandstand*

Motion to appropriate \$0 for the project. Motion overwhelmingly failed. No count provided by moderator.

Motion to appropriate \$250,000 for a lesser study. Motion overwhelmingly failed. No count provided by moderator.

Amendment to the main motion to appropriate \$450,000 – grandstand work shall include restoration and renovation and not demolition and replacement. Motion overwhelmingly failed. No count provided by moderator.

Main Motion – to appropriate \$450,000. Passed 126 to 7 with 1 abstention

In response to the Town Meeting actions, the Framingham Parks and Recreation Department conducted a competitive search for qualified designers/consultants and secured the services of Kaestle Boos and Associates, Inc. of Foxborough, MA.



*Baseball Batting Cage*

## **Master Plan and Project Approach**

The Master Plan has allowed for a more comprehensive analysis of costs and impacts related to reconstruction projects. It has examined impacting issues such as environmental concerns, fire codes, building codes, ADA compliance, historical concerns, programmatic needs, community interests, permitting requirements and neighborhood concerns. Estimates contained in this plan are based on conceptual plans and not final detailed construction documents.

## **Impacting Issues**

In completing the Master Plan, issues like neighborhood concerns, rivers acts, fire codes, modern egress and building codes, have all impacted the design of the Complex that may be somewhat different than if the projects were funded individually. A prime example is the Callahan Senior Center Parking problem. The Center parking lot is often full and relies on the Bowditch Track and Field space when it is available. It has become necessary to move the Track and Field events away from the Union Avenue to other areas of the complex in order to accommodate the overflow parking needs of the Callahan Center. The master plan approach chosen by Town Meeting will enable the department to address the problems in a comprehensive way and avoid unanticipated consequences.

## **Cost Estimates**

The estimates contained herein are based on current per square foot costs for comparable, recently completed construction projects. The estimates, as with all projects, will be further defined as detailed plans and specifications are prepared for a public bid. Professional estimators and designers will then work with the Town to review construction methods and materials to design in accordance to the allotted appropriation. The final elements contained in a Phase 1 construction project will be determined by developing detailed plans and specifications that will then be reviewed by professional estimators to develop the final project scope.

## EXECUTIVE SUMMARY

The Master Planning Process for the Bowditch Athletic Complex required the collaboration and cooperation of many entities within the Town. Throughout the planning process, meetings and presentations were held with Town Staff, Boards, Commissions, and residents. These interactions were paramount to establishing the goals, objectives and solutions of the project.

Although many deficiencies are identified and options developed, the main issues driving the Master Plan development were:

- Concrete grandstands that are structurally unsound and deficient in code compliance

- Maintenance Operations that have deficient facilities and are incompatible with the every day recreational use

- The need for additional parking for the Senior Center

- A limited footprint to resolve these and other issues discussed later in the report.

A thorough investigation of the existing conditions relating to the geography of the site and its use patterns revealed some significant limitations on planning and design concepts, as well as potential construction schedules. The site is bordered on three sides by developed residential neighborhoods, and the Sudbury River borders the fourth side. The current facility is heavily used during spring, summer, and fall by several local high schools and colleges, professional soccer teams, town-sponsored community events, not-for-profit youth sports organizations, and many Town residents. Daily use typically starts early in the morning with Town residents, peaks during the afternoon to early evening hours with school athletics, and with the facility lighting allows for use until well after dusk. The use of the track and field will be limited throughout construction, just as the Parks and Recreation Department's desire to maintain use of the complex during construction will limit the amount of construction that can be done in any season.

The Master Plan also addresses locker rooms and rest rooms, and improving the parking by relocating track and field events elsewhere on site. Streetscape improvements are planned for both Union Avenue and Walnuts St. The reconstruction of the Parks Maintenance facility required very focused efforts within the Master Planning process. Multiple design options were developed to relocate the maintenance facility at different location within the current site. In reviewing the potential new locations for the maintenance facility, it was ascertained after significant input that the best option was to move Parks Maintenance operations off-site to the Long's Athletic Complex. This location is dedicated parkland and is contiguous to multiple large tracts of Park owned properties and conveniently located near Parks and Recreation's Administration headquarters.

Based on the solutions included in the Master Plan, a detailed phasing schedule has been developed to define portions of the work that will allow for the continued use of the track and field, allow for future improvements, and provided the Town with a logical, step-by-step process for developing the improved Bowditch Athletic Complex. The Phase 1 Recommendations were based on a budget request submitted in the Fall of 06. The major elements assigned to Phase 1 reflects that given budget figure. A different Phase 1 approach may be required as final funding is determined. The total of all phases is estimated at \$6.75 million.



## MASTER PLAN: GOALS & PROCESS

### GOALS

In addition to the original seven project goals driving the Master Plan, additional goals were added as the project progressed.

Those include:

- Incorporating accessibility mitigation as defined in the recently completed Town ADA Self-Evaluation and Transition Plan
- Addressing and upgrading deficiencies related to current building and fire codes
- Assessment of current electrical service, and solutions for reducing demand charges currently incurred for lighting of athletic facilities
- Incorporating the needs of the newly constructed, and continuously growing, Callahan Senior Center as they relate to parking, exercise, and recreational activities
- Unifying the appearance of Bowditch Athletic Complex and the adjacent Callahan Senior Center
- Creating a more environmentally friendly facility by reducing construction impact in the existing Sudbury River floodplain and riverfront buffer zone.
- Eliminating incompatible use on the property by effectively separating maintenance operations from Pedestrian and recreational use.
- Blending Bowditch Athletic Complex into the surrounding neighborhoods through improved streetscapes along both Union Avenue and Walnut Street
- Formalizing and delineating some of the existing parking areas to increase efficiency

With all of these goals in mind, the Parks and Recreation Department and the Parks and Recreation Commission, assisted by Kaestle Boos and Lincoln Consultants worked to develop a plan that includes a phasing schedule for financial purposes and for the continuity of services.

### PROCESS

The final selected design for the Bowditch Athletic Complex is a result of several stages of investigation and planning. The following is brief outline of the process that led to the final Master Plan

- Review of initial goals for the Master Plan.
- Thorough site investigation of the existing conditions, including reviewing existing utility systems, structures, fields and site amenities. Numerous visits to the site were done to review the existing conditions and to observe the current trends in usage of the existing facilities.
- Review of historic drawings, reports and plans available from various Town Offices
- Meetings with the Building Commissioner, Fire Department, Police Department, Department of Public Works, Callahan Senior Center Officials, Planning Board Officials, etc.
- Discussions and meetings with Park and Recreation Staff to ascertain the history of the Complex and the deficiencies of the current facilities
- Examination of site environmental issues and applicable codes to ascertain potential impacts to redevelopment of the site
- Survey of the existing conditions of the sites conducted by a Licensed Land Surveyor.



- Public meetings to discuss neighborhood issues and solicit feedback pertaining to the Bowditch Site and programmatic needs. (see following list of community involvement opportunities)
- Informal hearings with the regulatory boards including Conservation Commission, Planning Board, and Historic Commission.
- Development of multiple options for addressing the goals and the constraints were developed and reviewed with Town Staff, Committees and general public. Obtained feedback at all levels pertaining to potential options, including Town Meeting, through updated progress reports.
- Design options revised based on input received from residents and Town Staff.
- Final presentation of options to the Parks and Recreation Staff and Commission
- Selection of preferred design option by Parks and Recreation Commission in February.
- Further refinement of selected design option, including the development of phasing plans and opinions of probable cost for each phase
- Presentation of selected option, along with phasing and opinion of probable cost to various Town Boards and Commissions
- Compilation of Master Plan document
- Final presentation to Town Residents

## COMMUNITY INVOLVEMENT AND PUBLIC PARTICIPATION

Several meetings were held during the Master Plan process to facilitate discussion within the community and obtain a more inclusive analysis of the project. Listed below are the meetings that were held.

<b>Date</b>	<b>Public Forum</b>
October 19, 2006	Local Neighbors of Bowditch Facility with Park Professional Staff
November 28, 2006	Framingham Parks and Recreation Committee Meeting
January 4, 2007	Framingham Building Commissioner, Fire Chief, Fire Marshall, Conservation Agent, and Stormwater Engineer
January 10, 2007	Town Planner and Framingham Police Safety Officer
January 25, 2007	Parks and Recreation Committee Meeting with town residents
February 13, 2007	Town Meeting, Presentation and Progress Report
February 7, 2007	Framingham Park and Recreation Commission
February 27, 2007	Framingham Park and Recreation Commission
February 28, 2007	Framingham Conservation Commission, Informal Presentation
February 28, 2007	Framingham Planning Board, Informal Presentation
March 15, 2007	Framingham Historical Commission, Informal Presentation
March 27, 2007	Framingham Capital Budget Committee
April 3, 2007	Framingham Standing Committee on Ways and Means

## Bowditch EXISTING CONDITIONS REPORT

### Bowditch Facility Overview

The Bowditch Athletic Facility is an 18.2-acre parcel of land situated within the floodplain of the Sudbury River. The property has an average north south axis of 1080' and an average east-west axis of 680'. It is surrounded primarily by residential neighborhoods, with a business abutting its northern property line and the Sudbury River on the West. Situated on the opposite bank of the Sudbury River is the Callahan Senior Center. The site is also bounded by Union Avenue on the West and Walnut Street to the East. The main vehicular entrance to the site is on Union Avenue and is located at the Southwest corner of the site. The facilities of the site are shared between the activities of the Park and Recreation Department (P&R) and athletics. The athletic fields are used by Framingham, Keefe Technical and Marian High Schools, Framingham State College, Massachusetts Bay Community College and by other groups such as Framingham youth football and Mass Premier Soccer association. In addition to organized sports, the track and other facilities are heavily use by town residents during all hours of the day and evening. There are a considerable number of Sunday basketball players, tennis class attendees, track joggers and walkers.

The site lies within or contains some environmentally sensitive and regulated areas. The entire site is within the 100-year floodplain of the Sudbury River. There are also bordering vegetative wetlands (BVW) associated with the banks of the river. There are state regulated buffer zones associated with the wetlands that will affect future development of the site as well as regulations pertaining to work within the floodplain. An additional regulated area is the 200' limit from the seasonal high water elevation of the river. This area is regulated by the Riverfront Protection Act and is administered by Massachusetts Department of Environmental Protection (DEP).



*Football Practice*

*Football field and Visitor's Grandstand*

### General Layout of Complex

Athletic/recreation facilities take up most of the land area of the site and include the basement of the administration building, which houses public toilets and team locker rooms. The centrally located stadium contains an athletic field and a recently refurbished synthetically surfaced track. The field is used for football,

soccer and other sports competitions. The field is an irrigated, natural turf surface with no under drainage. French drains have recently been installed on the east and west edges of the field. An electronic scoreboard is located in the northeast corner of the field, and the field is equipped with two wye type football goal posts. The field is flanked on the east and west by concrete grandstands built in the 1930's as part of the Works Progress Administration and seat approximately 1920 spectators each. The home grandstand on the West has a press box centrally located at the upper portion of the grandstand. The East and West grandstands are in poor condition and have significant structural issues. The existing grandstands also do not meet current Massachusetts accessibility codes and building codes (for egress and seismic considerations). A structural investigation report was completed in October 2004 and is attached as an appendix to this report.

A steel bleacher structure, for approximately 1290 spectators, is located in the southern "D" area. This structure also does not meet current Massachusetts accessibility codes and building codes (for egress and safety considerations). A 15' wide asphalt walk runs in front of this bleacher to allow visitors to pass from the west side of the field to the visitor's grandstand on the east side. Total seating capacity for the stadium is 5,130. The track and field are enclosed completely with six-foot high chain-link fence to control entry during events. Field related structures include the Lion's club concession stand, two ticket booths and an irrigation building located by the tennis courts.

### **Park and Recreation Department Administration Building**

The Administration Building is a one-story wood framed structure with a pitched roof. The exterior is sheathed with brick veneer and the roof with slate shingles. Site grading allows for a basement garage in the rear of the building. The exterior of the building appears to be in very good condition.

The Parks and Recreation Department Administration is located on the main floor of the building and includes offices and meeting spaces. Also on this level are toilet areas and a small locker room and shower. This level offers the only accessible toilet facilities and locker room for the entire complex.

The number of accessible toilet fixtures does not meet current code-required totals for the stadium facility seating capacity. Maintenance facilities are located on the basement level of the building with the basement garage for storage of carts and equipment, a small repair shop, and storage areas. Locker facilities shared by the Maintenance Staff and sports teams are also located in the basement. The locker room is used as a meeting room for roll call and assignments of the Maintenance Staff. Additional toilet rooms for the patrons of the complex are located in the basement, although these are not handicapped accessible and must be accessed by a flight of stairs from outside the building. Additional accessibility issues with the Administration Building have been identified in the recently completed Town ADA Self-Evaluation and Transition Plan.



*Administration Building*



## Maintenance

The Department has an equipment maintenance building (20'x40') west of the home grandstands. The area beneath the home and visitor grandstands is used to store Park and Recreation vehicles and equipment. The area below the home grandstand is enclosed with concrete block walls and overhead doors while that below the visitors grandstand is enclosed with chain link fence. Some maintenance equipment is stored outside along the Sudbury River. Material stockpiles are located along the river in the northwest corner of the site. Park and Recreation trailers and tractors are currently parked north of the home grandstands.

## Concession Stand

Currently, the Framingham Lion's Club operates the concession stand for football and soccer games and other special events. A discussion with the Lion's club president revealed that the concession operations are able to open windows towards both the football field and the field event lawn (area south of the Sudbury River). The concession stand is open towards Union Street for functions on the lawn area (bonfire, Graduation, etc.). They do not currently open the concession stand for Baseball games. The building currently contains two Coca Cola standing soda coolers, (1) refrigerator, (2) Freezers, an electric grill for hotdogs, an industrial two basin stainless steel sink and a small stainless steel sink for washing hands. There are storage shelves for candy, pre-bagged popcorn (no popcorn maker), and a microwave. While there is adequate space to install a grill for hamburgers, this has not been done. Twice a year, the Lion's Club utilizes gas grills outside for hamburgers, one provided by the Parks and Recreation Department and the other brought from off site. The building is serviced by water, sewer, and electricity.



*Tennis Courts*

*Basketball Courts*

## Baseball, Tennis, and Basketball

A baseball field (90' between bases) is situated north of the track and field. This is an irrigated natural turf field with no under drainage. The field plays 360' in the center and to the left field but due to site constraints, the right field plays at 293'. A four foot chain link fence and 24' high backstop enclose the field. Two bleachers serve this field. The larger one, sitting approximately 160 spectators, is on the west side of the field. This metal and wood bleacher structure is elevated and does not meet current Massachusetts accessibility codes and building codes (for egress and safety considerations). The small steel and wood bleacher, sitting approximately 27 spectators, is on the east side and has 5 rows, sitting on the ground. A batting cage, consisting of netting and poles is located southeast of the baseball field.

Two basketball courts and four tennis courts are located to the east of the visitors grandstand. The tennis courts are surrounded by chain-link fence while the basketball courts are enclosed on the south and east by a wood guardrail, its other two edges being the tennis courts and visitors grandstand. Both surfaces are acrylic surfaced and are in relatively good condition. Some ponding was observed on both the tennis and the basketball courts after a rain event.

Other track event facilities other than the track itself are located on the western portion of the site. The large lawn area adjacent to Union Street is used for shot put, javelin, and discus events. Various concrete platforms are located in corners of this area for these activities. The discus area has a removable net system that is installed only in the spring. Tucked between the home grandstands, baseball field, and the river are the high jump area and the long jump- triple jump, both covered with synthetic surfacing. The two long jump triple jump runways share a common pit at the north end of the runways.

Located along the perimeter of the site are different stations of a fitness course. Some of the stations are in good condition, but others have been abandoned and are unusable. All of the wood for these structures is in poor condition. The Parks and Recreation Department has stated that the course is no longer used.

### Lighting

Most of the events within the facility are equipped with lighting. Eight large wooden poles with multi-fixture light banks provide lighting for the main football, track, and grandstands. Eight additional large wooden poles, with similar light banks, provide lighting for the baseball field. Smaller light fixtures on steel poles provide lighting for the tennis and basketball courts. The lighting for these courts is on timers activated only as needed, and automatically turned off at 10:30 pm. Timers also provide the lighting for after-hours use of the track. Two light banks, one above the east side grandstands and one above the west side grandstands, are left on for this purpose. Additional security lighting for nighttime hours consists of strategically located lights around the administration and other outbuildings of the complex. The system is not very energy efficient, and lends to the increased demand charges the Parks Department currently incurs. Although the Parks Department has made some preliminary adjustments to the electrical distribution system, further work is required to effectively address the demand charge issues.

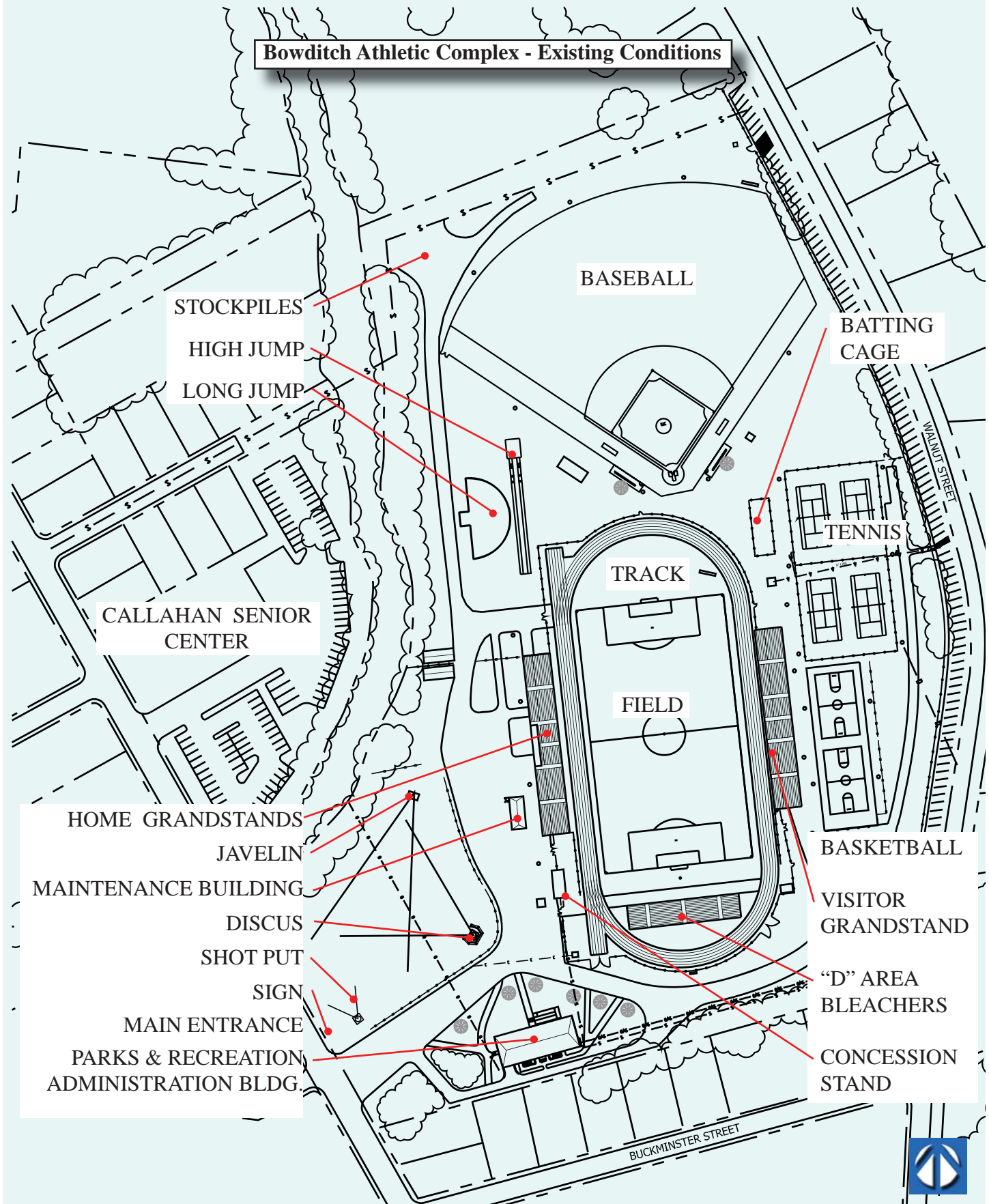


*HC Parking at Main Stadium Entrance*



*Parking between the Pine trees*





## Traffic Circulation

The main “roadways” within the site are paved. The majority of this pavement is in very poor condition. The main entrance from Union Street is very wide (65') with inadequate striping to designate travel lanes. The south side of this entrance is used to park vehicles at a 45-degree angle or parallel park. There are often barriers or cones set up to help regulate the flow, especially during events. The entrance road forks in front of the Administration building with one road heading north to the area west of the Home Grandstand and the other around the southern end of the track. The north road (mostly gravel) continues along the river where it bends around the top of the baseball field and terminates at the materials stockpile area. Beyond the home grandstands, this road is mainly used by Parks and Recreation maintenance vehicles, and access is restricted by fencing, a gate, and signage.

The east road runs around the south end of the track to a parking lot south of the basketball courts and to the visitor bleachers where Park and Recreation vehicles and equipment are stored. This road connects to a gated vehicle entrance on Walnut Street, located at the southeastern corner of the property and a small maintenance road that doubles as a sidewalk running along the eastern edge of the tennis courts and terminating at a gate and guardrail leading to Walnut Street.



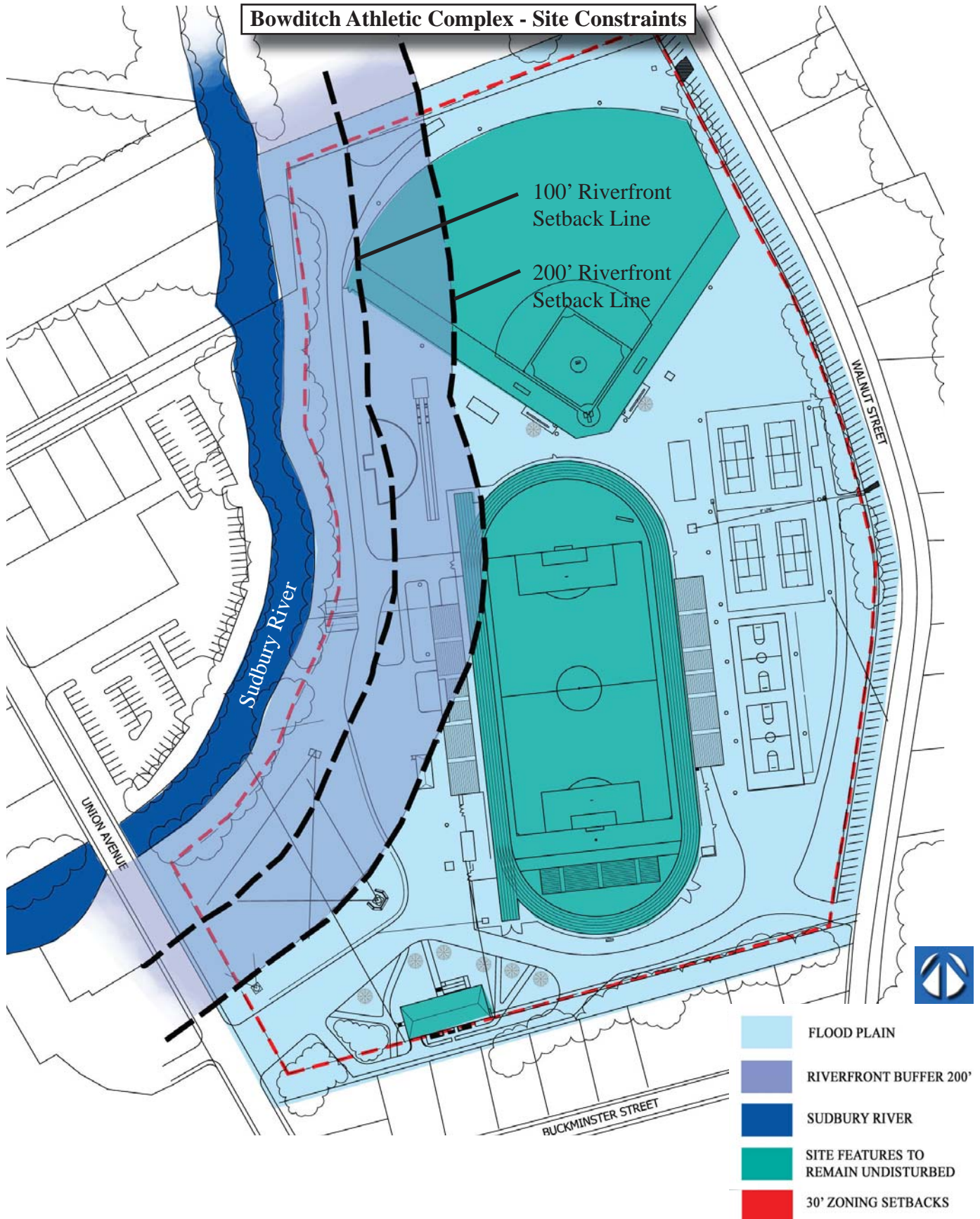
*Walnut Street Parking*

## Parking

On-site parking is limited. Defined parking spaces (painted lines) are limited to the entrance area and a few handicapped spaces against the track perimeter fencing and in front of the concession stand. Most of the areas used for parking cars are neither paved nor striped. For everyday use, Parks and Recreation personnel park their private vehicles on the unpaved area against the track perimeter fence along the southern end of the field and under and between the Pine trees that line the south edge of the property. Everyday visitor parking to the administration building is directly in front of the building, and in front of the concession stand. Event parking takes place both on and off site. Spectators can park on the lawn area that fronts Union Street (@80 spaces), accessible through a break in the wood guard rail or directly from Union Ave. through a gate north of the complex main entry. Others park at the Callahan Senior Center (94 spaces) or along Walnut Street (113 spaces) directly adjacent to the complex. Overflow for special event parking occurs in numerous local privately owned parking lots and usually does not impact the businesses as most of these events occurs on weekends or after hours. On-site handicap parking consists of 4 spaces, all located along the track perimeter fence.

The only curbs on site are concrete wheel stops, which are located along Walnut Street (these are in poor condition), the parking area in front of the concession stand, and along the lawn pavement line in front of the administration building. Wooden guardrails form most of the barriers between pavement and lawns. There is a long guardrail protecting the lawn to the north of the Main entrance, a guardrail and gate that runs between the north end of the home grandstands and the river and a wood guard rail, previously mentioned, at the end of the





drive/sidewalk east of the tennis courts.

### **Pedestrian**

Surfaces for pedestrian circulation consist of concrete and asphalt, gravel and lawns. Sidewalks around the Parks and Recreation Administration building, walks and open paved areas around and leading to the three different grandstands, basketball and tennis courts are either concrete or asphalt. Access to the track field events and baseball is across lawns. There is a designated concrete sidewalk on both sides of Union Street. There are sidewalks along both sides of Walnut Street. The sidewalk on the west side consists of a 3' paved area (designated by paint) running between the chain link fence and the wheel stops of the Park parking. A new concrete sidewalk with curb, is currently being installed on the east side of Walnut Street.

### **Vegetation**

Most of the site beyond the paved areas and structures is covered with lawns. The exception is around the administration building and a few dedicated plantings near the track and baseball fields where perennials have been planted as foundation plantings, around the bases of trees and around plaques or boulders. Some stand-alone planters are located at the entrance to the site from Union Street and at the entrance to the field and track, near the Handicapped parking area. Apart from the natural riverfront vegetation, which consists of wetland type shrubs, vines and trees, the rest of the vegetation on site consists of trees around the administration building, and along the east, west and south property lines. These are a mix of pines, lindens, maples and locust trees among others.

### **Dedications and Monuments**

There are multiple historically significant plantings and dedications located throughout the Complex. Any future development should attempt to respect these dedications and plantings. The proposed master plan improvements respect and maintain all existing dedications and plantings.



*Pines on Southern Property Line*

### **Bowditch Site Deficiencies**

Based on the detailed review of the existing conditions at the Bowditch Athletic Complex, the following deficiencies and future design considerations were identified.

- Impacts within floodplain, wetland and riverfront buffer zones.
- Accessibility codes, deficiencies pertaining to existing facilities including grandstands, bleachers and buildings. The remaining lifespan and safety of the existing concrete grandstands
- Building and egress codes, deficiencies pertaining to existing grandstand structures.
- Incompatible uses of maintenance facility and recreational activities.
- The total number of handicap parking spaces on site.
- The accessibility of all structures, fields and facilities.
- The current electrical service demand charges incurred by Parks & Recreation Department for lighting the athletic facilities.
- Drainage problems in parking areas.
- The conflict between pedestrian and vehicular traffic.
- The storage of maintenance materials in proximity to river resource.
- The visual connection of the stadium facility to Union Avenue and Walnut Street.
- Overflow parking from Callahan Center

## **Longs Park EXISTING CONDITIONS REPORT**

The Loring Arena is part of Longs Park Athletic Complex. The Longs Athletic Complex is dedicated Parkland and is protected under Chapter 45 of the Massachusetts General Laws. The parcel being considered for the development of a Park and Recreation Maintenance facility is a 3.15-acre parcel of land west of the Ice Rink. This site is contiguous to 25% of all Framingham Park and Recreation property and is in close proximity to other large Park Facilities, including Bowditch Athletic Complex, Mary Dennison, Roosevelt Park, Butterworth, and the Galvani Complex. This site is also adjacent to Keefe Technical High School (Keefe Tech). The Parks Department has as strong relationship with Keefe Tech that benefits both the educational programs at school and the Park services of the Town. The proposed location will build upon and strengthen the existing educational training programs between the Parks Department and the school. Peter Dewar, Keefe Tech Superintendent, is very excited about the potential to have the Parks Maintenance facility in such close proximity. See letter of support from Keefe Technical High School Superintendent in Appendix.





The area considered for redevelopment is now used for school district bus parking, hockey rink parking, and support parking for 7 adjacent athletic fields, and Keefe Technical High School. During daily operations, there is a need for parking for the buses as well as the private vehicles owned by the bus drivers and monitors. The area has an average north south axis of 260' and an average east-west axis of 560'. West of the site is the Keefe Technical High School. The site is bordered on the south by Fountain Street, which is about 2' higher on average than the parking lot. A planted strip of lawn takes up the grade change between the parking lot and Fountain Street. An industrial area and rail yard are located across Fountain Street. The Loring Arena defines the area on its Eastern edge and baseball fields and roller hockey rink abut the northern edge. The entire site pitches from West to East, with a spill off for drainage just east of the unused roller hockey area (old tennis courts). The parking lot has no curbing and sections of grass along the northern edge are now being used for the parking of buses and cars.

### **Buildings and Facilities**

The only structures on the site are a brick building on a concrete foundation and a trailer. The building has water and sewer hook-ups. The brick building is approximately 40' x 20' and the trailer is 16' x 45'. These buildings are used by the Framingham School Department for running the everyday operations of Framingham School District bus service.

The paving in the area being considered is in mediocre condition. According to the bus coordinator, there are 96 buses being stored on the facility.

The Easterly portion of the paved area, adjacent to the Ice Arena, is used during afternoons and weekends for Ice Arena parking. An area just outside of the rink and defined on three sides by Jersey barriers is used to stockpile snow from the rink operations. There are plans to expand the Loring Ice Rink building to the west with additions for team rooms.

### **Property Usage**

The Parkland is essential to support the parking needs of the 7 adjacent athletic fields and the hockey rink. The athletic fields consist of 2 major league baseball diamonds, one of them lighted, 3 lighted little league fields, a one lighted softball field, a football field, and a soccer field. Some of the fields are multi-use. Since some well meaning accommodations were made in the 1970's to accommodate the school busing needs, the busing storage needs have doubled, and the activity level of the community and adjacent athletic fields has more than doubled. The results of this have been a difficult management issue for both the Park and Recreation Department and the School District. During Pop Warner Home games, cars are parked on the sides of surrounding streets causing safety concerns. Rink users often block other cars or are parking in the street. The arena has lost revenue and the opportunity to host special events like the Massachusetts Super 8 High School Hockey Tournaments because the Loring Parking Lot is not available. The Park Department and the School Department have been communicating to find some alternatives to some of the bus parking for both short and long term solutions.

## PROJECT MASTER PLAN

The Bowditch Athletic Complex Master Plan contains athletic, architectural, circulation and utility improvement recommendations. Many of the recommendations are interrelated and contingent upon others. The phasing and budget considerations are addressed in the Master Plan Implementation Section. Alternatives and options considered but not included in the final master plan design are outlined in the Considered Options Section. Other local athletic facilities were reviewed during the planning process to ascertain recent trends in athletic complex renovations. A description of one of these facilities can be found in the reference portion of this report.

### 1. Parks and Recreation Facility

Due to the limited size of the complex and the problems that arise from the work of the Parks and Recreation maintenance operations and the pedestrian use of the facility, it is recommended that the maintenance department be relocated off site. Parks and Recreation administration would remain on site in the present building. A small 24' x 40' garage housing only those vehicles and equipment used to maintain the Bowditch facility would be constructed south of the visitor's grandstand.

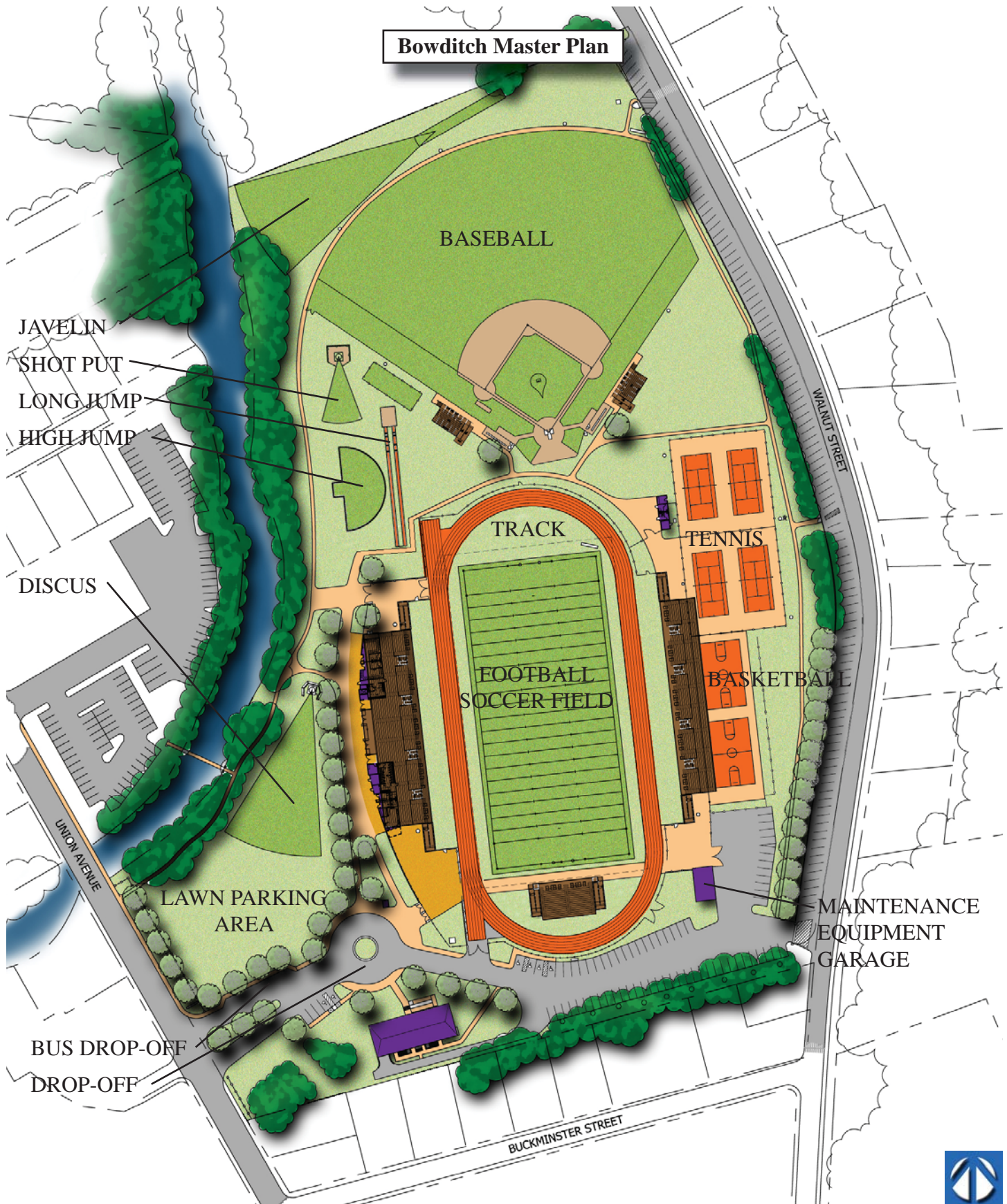
The Park and Recreation maintenance facility is proposed to move to the Longs Athletic Complex, adjacent to the Loring Arena. (See # 7 of this section). Relocating the maintenance facility off the Bowditch Complex will allow the department to relocate some of the track and field events, free up some parking needed for the Senior Center, eliminate dangerous conflicts with park maintenance operations and park users, and provide the town with some future flexibility. It will also address the noise and smell concerns expressed by the residential neighbors around the Bowditch Complex.

### 2. Grandstand Improvements

Master Plan improvements to the grandstands include the demolition of all of the bleachers and grandstands. The home grandstand would be replaced by an accessible code-compliant structure that seats approximately 2,375. It would be accessed by four egresses that empty through and below the grandstand to a paved area as well as by two HC accessible ramps at the grandstand's north and south ends. Access out of the area below the grandstands would be provided at either end of the grandstands or to the west out gates located between the proposed structures described below. The home grandstand would incorporate a new press box with two accessible filming platforms on either side as well as an elevator for accessibility.

Tucked below the home grandstand would be two building structures. The southern most of them would contain an official's rooms, women's public toilet facilities, concession stand, and mechanical and storage space. The northern building would contain team locker rooms, men's public toilets, storage space, and the elevator with its mechanical room. Ornamental fence between the buildings at either end of the grandstands are designed to control entry to the stadium by helping to enclose completely the field and grandstand complex. Due to this enclosure, the toilet rooms and concession stand are designed in such a way that entry may be achieved from either below the grandstand or from behind it (outside of the fenced area) for use during events outside of the stadium. At the south end of the home bleacher area, the main entrance, lined up on the axis of the main entrance road and placed adjacent to the round drop-off area, will consist of two sets of ornamental gates, with brick or block columns supporting them.







A separate stand-alone ticket booth structure is located just west of the main field entrance. The fenced-in area between this entrance and the field would be larger than the present area, providing an area for gathering and also for queuing of concession stand patrons. All structures should be protected by a security/ fire alarm system.

The Visitor grandstand would be the same length as the home grandstands with the same existing configuration and an estimated seating of 1,595. Fewer visitor seats are proposed to reduce the depth of the stands, resulting in minimal impact on the existing tennis and basketball courts that are to remain in their current location. Seating capacity can be increased by increasing the cantilever of the grandstands to extend further over the courts but they will then extend into the court boundaries. Another difference is no structures are proposed to be constructed below the visitor grandstands. An 18' corridor running the entire length of the grandstand would guide spectators to either the north or south ends for exiting. A fence would define the back (East) edge of this corridor and would prevent spectators from exiting directly on to the tennis and basketball courts and maintain control of event entrance and exit locations. At the north end of the grandstand, one building would have men's and women's toilet facilities and a mechanical room that would also contain the complex's irrigation control and a small concession stand that would service both the baseball field and the football field. Fences and gates would control access to this grandstand and facilities. All permanent grandstands are to have rise and run dimensions of 30" horizontal and 12" vertical to match the existing grandstands. The rear of both the visitor and home grandstands is proposed to be "dressed up" on the upper portions of the structure to better define the mass of the structures and to provide a cleaner look. It is proposed to add a metal screening mesh on the two structures to give the illusion that the upper areas are solid while still allowing light and air to pass through them. Materials for screening would be weather resistant and be fastened to the grandstand structure.

In the southern "D" area of the field, inside the track, a new bleacher system on a concrete slab consisting of 500 seats is proposed. This bleacher would have two accessible ramps attached at either end. This bleacher system will help to provide the enclosed stadium "feeling" that is currently present on site.

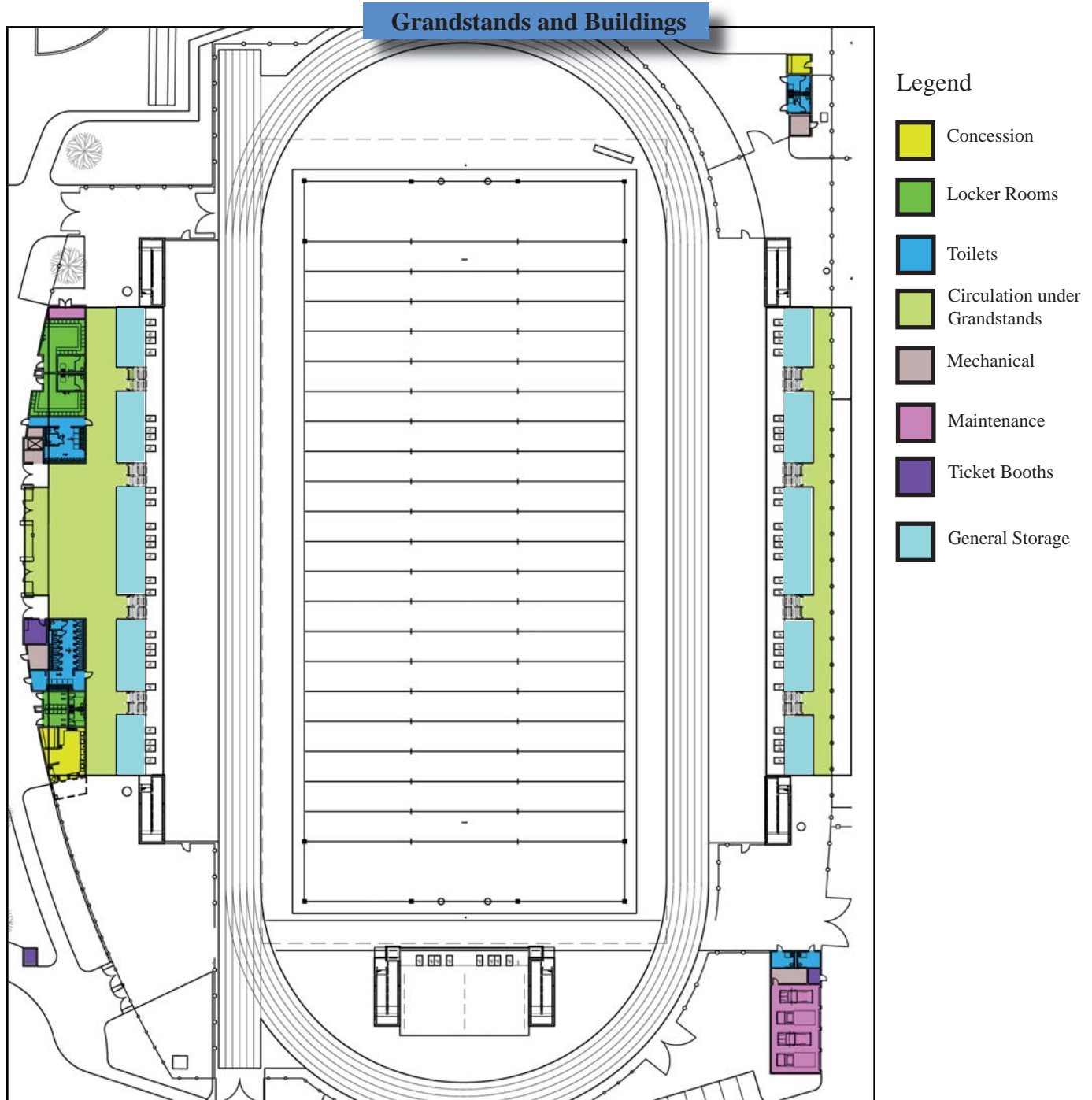


Dilboy Stadium  
Somerville, MA

Completed 2006

Replaced a former WPA  
project

Similar to Proposed  
Bowditch Project



On the baseball field, two new bleacher systems, seating 163 each would replace existing structures and be located along both foul lines. Each bleacher would have one ramp and a stair for access and egress. Accessible paths would service these bleachers. Additional upgrades to the baseball dugout areas are also proposed. The Park and Recreation Department requested that the player bench areas be roofed. Proposed roof structure would consist of a pre-fabricated metal roof, open on all sides to maintain sight lines and security. All metal shall be coated to provide weather protection and ease of maintenance.

### **3. Entrance & Circulation Improvements**

A lack of identity and sense of entrance, combined with ill-defined circulation prevent the Complex from having a high public profile. Without a clearly defined separation between vehicular and pedestrian circulation, pedestrian safety is at risk. It is recommended that a more clearly defined entrance from Union Avenue be considered. Aligning this entrance with the entrance drive to Perini Corporation across the street and creating a 90° angle between Union Avenue and the new drive would create a safer intersection. As part of this proposal, narrowing the road by including a planting island would help in directing traffic and improving the entrance image. Other elements to improve this image would include the construction of a new sign for the complex and replacing the chain-link fence with ornamental fence and posts.

#### *Vehicles, Parking, and Traffic*

With Parks and Recreation vehicles, school buses, private coaches and resident's vehicles all sharing the site, there is a definite need for separation and definition of vehicular uses and circulation. A bus parking and drop-off area is proposed near the lawn parking area (southwest corner) to serve the numerous field trips that originate from the site. A turn-around loop, located in line with the entrance road and the stadium gates is large enough to accommodate the turning of buses and provide a designated drop-off area for stadium events. Paved, striped and graded parking, separated by curbs from pedestrian sidewalks would provide a more efficient and cleaner use of the existing parking areas. Some areas of parking may not require curbing and pavement if used occasionally for special events. Also, the use of porous pavements in areas used only in spring, summer and fall should be considered to be sensitive to the flood plain and reduce runoff.

#### *Pedestrians*

Except for the sidewalks that run along Union Street and the walks that join the Parks and Recreation Administration building to the internal roadway, there are no walks on the site specifically designated for pedestrian use. New sidewalks would provide direction and accessible access to the new Grandstands, fields and facilities, including toilets, locker rooms and concession stands. A different pavement type from that of the roadways would help define the difference further. An additional path around the north end of the track, outside of the fence, would provide accessibility to the north end of the visitor's grandstand as well as the two proposed baseball bleacher systems. During one of the public input sessions, the idea of providing a pedestrian path around the periphery of the site, connected to the Senior Center across the river was discussed. As a result, an accessible pedestrian path has been incorporated into the design with a connection to the Senior Center via an accessible pedestrian bridge over the Sudbury River. This path should be surfaced with materials sensitive to their locations on site. Areas within the 200' riverfront buffer zone should be surfaced with pervious materials. This path would also be the likely location for installation of new fitness stations if deemed desirable.

To increase pedestrian safety outside of the facility, it is recommended that the town add a crosswalk across Walnut Street linking the north end of the facility to the new walk on the east side of the road. Preferably this connection would occur at the striped entrance to the Bowditch Facility just north of the baseball field. A new curb ramp may be required on the east side of Walnut Street to accommodate the crosswalk location. A blinking yellow light that can be activated by pedestrians may also be appropriate at the main entry at Union Avenue. This type of signal has been used in neighboring municipalities with success. The light would only flash when the button is pressed by pedestrians, otherwise local drivers would get used to the flashing light and over time ignore it.

Another improvement the town could make to enhance the pedestrian experience when approaching the town complex (Callahan Center & Bowditch Complex) is to wash the existing Union Avenue Bridge. Cleaning this bridge would visually complete the link between the two town-owned facilities.

#### 4. Field Event Improvements

Since the lawn area at the southwest corner of the site is used for an overflow parking area throughout the year, the existing throwing events have been relocated within the site to free up the majority of the lawn area for parking. This is especially helpful during the busy spring baseball and track season. The high jump and long jump - triple jump would remain in place. North of these are the new locations for the shot put and the baseball batting cage. The discus platform and net are placed behind the home grandstand with the throwing area being the north portion of the lawn area adjacent to Union Avenue. Javelin would be moved to the area north of the baseball field, with the athletes throwing towards the west. In addition, as part of the improvements to field events, the existing scoreboard within the track should be modified to be able to be controlled wirelessly to increase flexibility during events. General storage for track and field and other athletic equipment has been provided under the grandstands. These areas are protected from the worst of the weather and can be secured.

#### 5. Planting Improvements

New site plantings are suggested to define pedestrian circulation, improve street presence, enhance visual corridors and separate different site uses. It is recommended to plant a row of street trees and add shrubs and flower plantings along Union Street, and in the traffic island in the main entrance from Union Street. These plantings would help define the entrance space and strengthen the connection between the Bowditch Complex and Callahan Senior Center. Another row along the north side of the entry drive would help direct the view from Union Street to the three gates at the drop-off area in front of the administration building. Another line of trees long the main entrance walk to the rear of the home grandstands would help enclose the lawn area on Union Street (used for temporary parking during events) and separate the vehicles from the pedestrians using the walk. Shrubs and other plantings are recommended on the east side of this walk to help soften the transition



*Proposed Perspective from Union Street Entrance*



of the walk to the rear vertical surface of the grandstand and buildings and around the drop-off circle to help define it. Additional street trees should be added along Walnut Street to fill in the gaps among the existing street trees. All plantings should conform to town regulations for species and size.

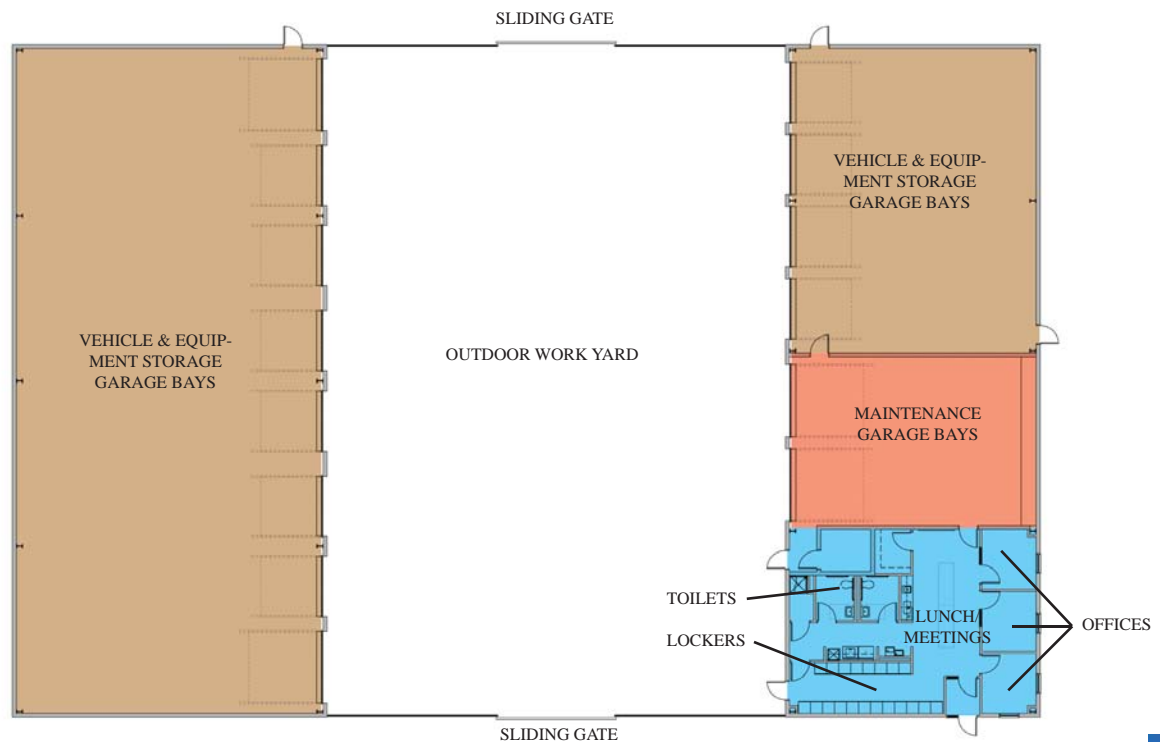
Selective clearing of existing vegetation adjacent to the Union Avenue Bridge is recommended to open up views to the river as well as highlight the bridge. This would strengthen the river's presence along Union Avenue, create better views into the Bowditch complex and visually connect the Bowditch facility to the Callahan Center. Any proposed clearing/planting should be reviewed with the Conservation Commission prior to being done.

## **6. Site Lighting Improvements**

Site lighting for the stadium would be replaced by new poles with a lighting system that would allow for different luminosities, depending on the events taking place on site. Four poles would light up the stadium, each pole being located at the ends of the home and visitor grandstands. Field lighting levels should meet requirements for sports using field with a minimum of 50-foot candles being acceptable. Additional lighting on the stadium poles would properly illuminate the north & south end of the track for recreational use by town residents. All lighting should conform to existing time limits of operation. Some all-night security lighting, in and around the stadium, is needed. Some pedestrian lighting should be provided for the pedestrian walk around the entire complex. Pedestrian lighting is recommended off the back and beneath both the home and visitor grandstands. Vehicular lighting is also recommended for the main entrance road and bus area. All of this lighting would be shielded to prevent glare off site. Field lighting poles should be approximately ninety (90) feet high, vehicular lighting approximately eighteen (18) feet high and lighting along walkways approximately twelve (12) feet high. The athletic complex will be used throughout the year, so having appropriate lighting is necessary to ensure the safety of all users.

## **7. Longs Athletic Complex/Maintenance Yard**

The Master plan includes the relocation of the Park and Recreation (P&R) maintenance yard from Bowditch Complex to an area on the Longs Athletic Complex. The site chosen for this is the parking lot, located west of the Loring Arena. Redevelopment of this area will still allow for school bus storage parking assistance, although to a lesser degree. Improvements would include the construction of two roofed buildings, one of which would cover vehicles and equipment and the other which would enclose a space for Park and Recreation personnel, a maintenance garage for department equipment, and an equipment storage area. Separation of the buildings significantly reduces the cost of sprinkler systems that would be required of one larger building. The area between the two buildings will be enclosed with fencing and gates and will create a P&R maintenance work yard, eliminating the potential for general pedestrian/vehicle conflicts and provide a secure area for equipment. The building encompassing the personnel area, maintenance garage and vehicle storage area is approximately 40 feet by 100 feet. The vehicle storage building is approximately 50 feet by 100 feet.



### *Maintenance Operations Buildings*



The Personnel area would be approximately 30' x 40' and incorporate the following:

Offices

General office spaces for Maintenance Supervisors

Locker Room

Lockers for 20 persons

Lunch Area/Meeting Area

Informal meeting/Roll call for 30+ persons.

Kitchenette – Base/wall cabinets with sink, fridge and microwave

Men's & Women's toilet rooms w/ one Unisex Shower.

The Maintenance area would be approximately 30' x 40' and directly attached to the Personnel area and have benches, equipment, and lifts necessary for maintaining the P&R vehicles and equipment. The remaining portion of this building would be for storage of maintenance equipment and would be accessed via overhead doors from the work yard. The Maintenance area would also be used as overnight storage areas for two of the maintenance vehicles. The vehicle storage area would not be heated but will be fully enclosed. The Personnel area and maintenance area would be heated.

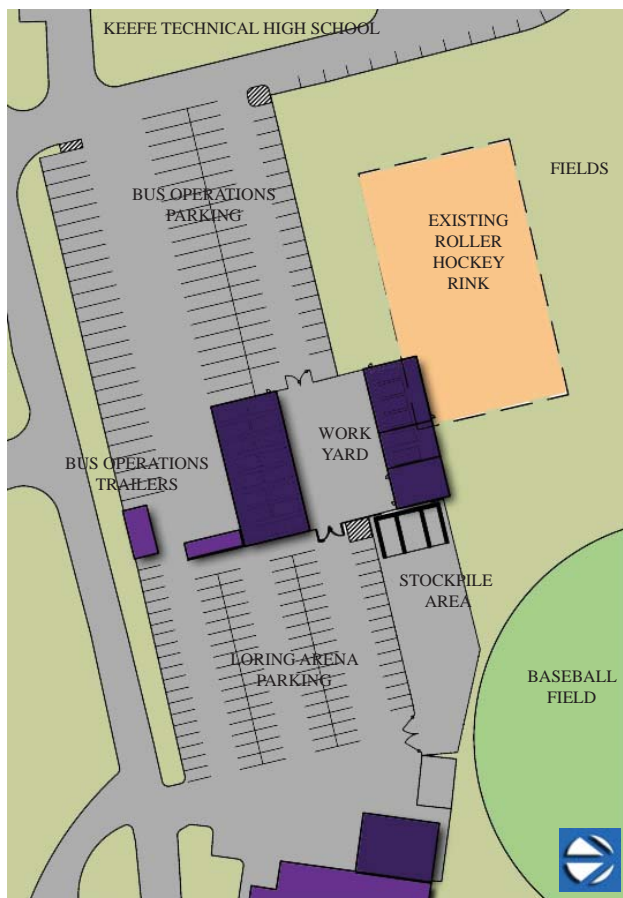
The vehicle storage building would be an enclosed, unheated building with multiple overhead doors facing the work yard. Electrical plugs would be provided for diesel vehicles. The building would house approximately 18 vehicles, stacked two deep. The garage and equipment storage capacity is based on a complete review of the inventory of Parks and Recreation Department vehicles and equipment. A list of the vehicles is included in the appendix.

Additionally, a fenced stockpile yard would be constructed on the northeast side of the maintenance buildings. Heavy concrete blocks would separate the different stockpiled materials.

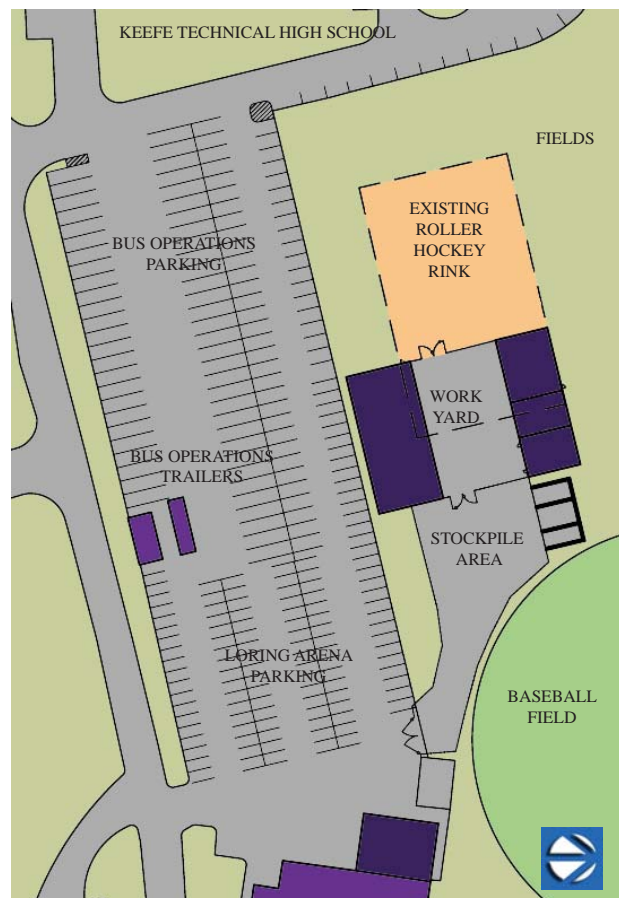
Parking for the private vehicles of the Park and Recreation work force would be provided east of the work yard. It is estimated that thirty spaces would be necessary during the summer months.

The maintenance and vehicle storage building placement remains flexible at this point. The following maintenance building plans show two potential locations for the proposed facility. The first plan locates the structures within the existing parking area. This plan provides optimum flexibility related to recreational space by allowing for future expansion of athletic fields and a skate park. This plan removes approximately 11,265 sq ft of available parking. The second plan relocates the maintenance facility utilizing existing recreational and green space. This plan significantly limits future recreation expansion opportunities, however, eliminates no parking.

The types of construction considered for the maintenance and vehicle storage buildings are masonry veneer, decorative masonry units, metal panels or a combination thereof. The final design will be determined as further refinement of the building structure and code review is conducted in addition to professional cost estimating and in relation to the overall budget as described in the introduction. It has been expressed by residents and



*Site Location : Option 1*



*Site Location : Option 2*

Town Meeting Members that it is desirable to have aesthetically looking façades. Based on feedback from various boards and residents, these buildings shall balance aesthetics, with appropriate building size and construction cost when final selection of methods and materials is considered.

A square footage costs of \$140 is currently being used for planning purposes for these two buildings. As design drawings are being developed and construction method is determined, further refinement of cost per square foot shall be done. The \$140/square foot is based on comparison to recently completed facilities at the Pine Brook Country Club in Weston, MA (\$166 per square foot) and other recently completed DPW garages (averaging \$190 per square foot).

## 8. Permitting

Since the entire Bowditch site lies within the 100 year floodplain of the Sudbury River, care must be taken not to create any flood hazards or impact site's flood storage capacity.

Any new development must follow current Massachusetts Department of Environmental Protection regulations and go through a permit

process with the Town of Framingham's Conservation Commission. Raising existing grades or the construction of enclosed building area totaling more square feet than existing structures is prohibited without mitigation. The Conservation Commission must approve any mitigation.



*Framingham DPW Garage - Similar Proposed Construction*

The site also falls within the buffer limits of the Massachusetts Riverfront Protection Act. The two buffers zones are delineated as the zones that fall within 100 feet and 200 feet from the seasonal high water elevation of the Sudbury River. Redevelopment within these buffer areas is regulated and must be permitted through the Framingham Conservation Commission.

Likewise, any work done within the wetland limits or buffer zone must also be permitted through the Conservation Commission. Permitting for floodplain wetlands and riverfront buffer impact would be via a notice of intent (NOI) filing.

Additional permitting for site work might include a site plan review done by the Framingham Planning Board. However, during an informal presentation to the Planning Board, the Town Planner and individual Planning Board members noted that a site plan review might not be required since the use of the Bowditch site was not being changed. Any new construction will also require permits from the Board of Health (for concession stand and sanitary facilities) and the Building Commissioner (for demolition permits and building permits as well as code review). The Framingham Historical Commission has outlined its demolition delay permit procedures and noted that public hearings are triggered by the proposed demolition of structures over 50 years old. See Other Considered Options for more information on the historical aspect of the stands.

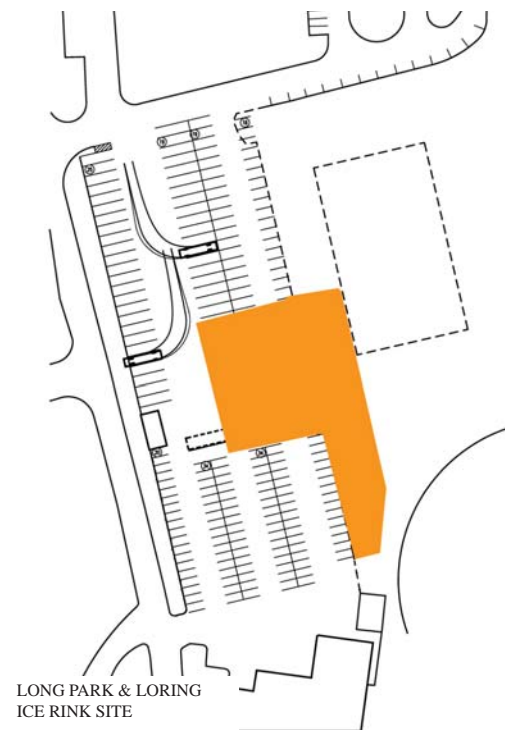
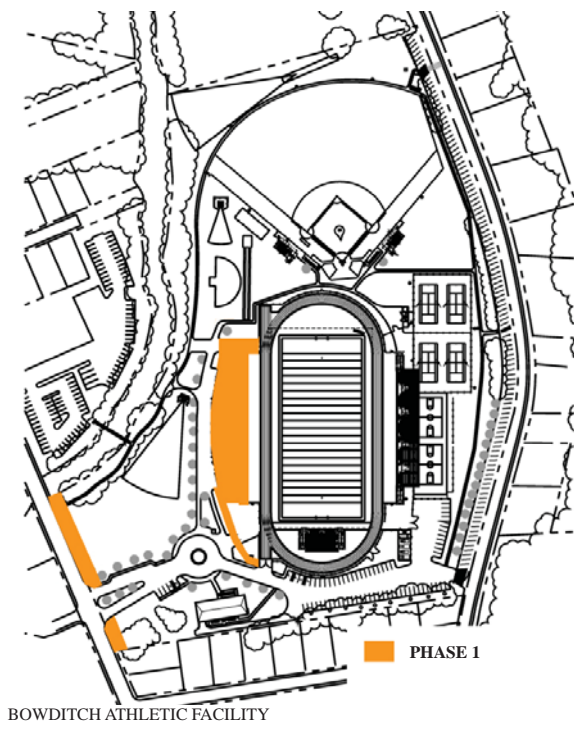


## PROJECT PHASING

The implementation of the master plan is broken down into three distinct phases in order to meet the financial and political realities within the town. This breakdown in no way restricts the town from implementing a few elements of a phase or all of them at one time. The phases were the result of reviewing the constructability sequence of the different elements and their relationships to one another. Phasing also considers construction sequencing so that disruption to the athletic complex users is minimized as much as possible. Even if the town funds the entire project for construction at one time, construction phasing would still be needed to keep the major fields open for use in the spring and fall.

### Phase 1 (\$3,999,950)\*

- The construction of the maintenance facility and stockpile area at Longs Athletic Complex site.
- Demolishing and removing the home grandstands, concession stand and maintenance building.
- Installation of foundations for home grandstand and subsequent grandstand construction.
- Construction of the buildings under home grandstand.
- Paving of new walks under home grandstand.
- Stadium field lighting replacement.
- Installation of fencing on west side of field to re-establish event perimeter.
- Installation of new Ornamental fence along the length of Union Street, replace current chainlink fence.
- Irrigation and ornamental plantings & street tree planting along Union Avenue.
- New handicapped parking would be striped and signed as shown on plan.
- New Complex sign and message board at Main entrance.
- Construction of temporary accessible stone dust path north of the track.
- The installation of the underground main utility infrastructure to service the entire complex. This would include water, electric, drainage and sewer connections.

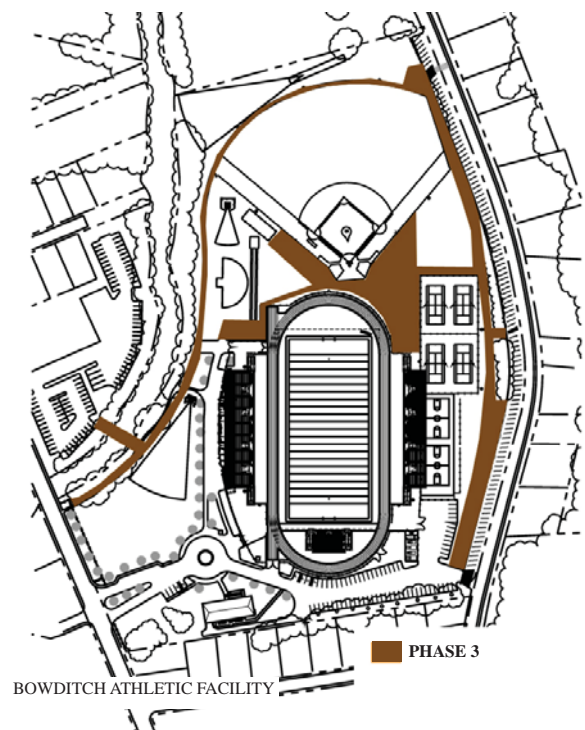
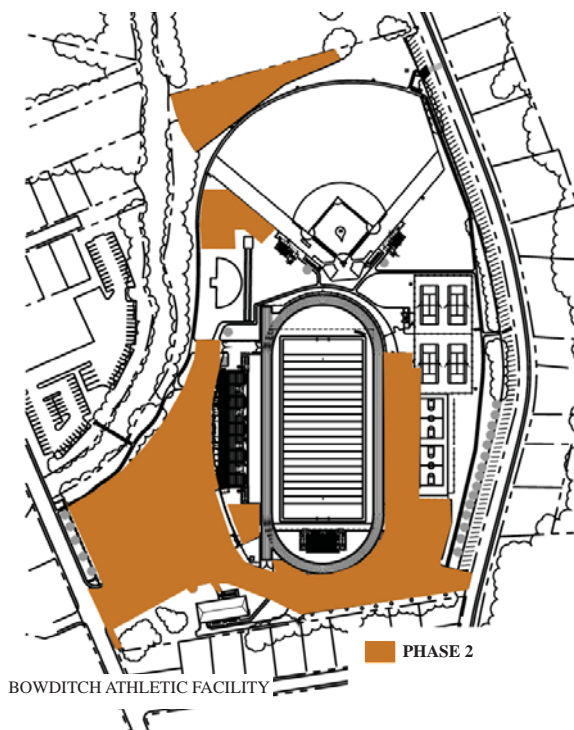


**Phase 2 (\$1,772,478)\***

- Demolition of visitor grandstands and construction of new visitor grandstands.
- Construction of the entrance road and drop off circle. This would include the construction of the planting island entrance, bus area and associated curbs and sidewalks.
- New lights for this entrance road
- Construction of pedestrian path to the back of the home bleachers, new ornamental fence, and entrance gates and pillars at the drop-off circle.
- Re-grading and paving of the area south and south east of the track and subsequent striping of the lot to delineate parking spaces.
- New flagpole for site.
- New discus and shot put area in current area for discus and long jump triple jump to east of baseball field.
- Relocation of batter's cage.
- Tree and shrub planting along Main entrance road, drop-off circle and stadium entrance and along both sides of the sidewalk behind the home grandstands.
- Rework of lighting at basketball courts.
- Lighting of pedestrian areas around grandstands.

**Phase 3 (\$982, 619)\***

- Construction of toilet structure north of the visitor's grandstand as well as connected gates and fences. Re-routing of water and irrigation lines to fit into this structure.
- Construction of pedestrian loop walk around site.
- New baseball bleachers and pavement to connect to accessible route north of track.



- Improvements along Walnut Street. This would include new wheel stops, landscape improvements and new infill plantings of trees.
- Pedestrian bridge across the Sudbury River to tie into pedestrian loop walk.

*\* See breakdown of Opinion of Probable Cost for additional information*

This phasing sequence is only a recommendation and is contingent upon funding allocated by the Town of Framingham.

### **Potential Alternative Funding Sources**

No substantial alternative sources of funding that can contribute significantly to complete these capital programs have been identified. A preliminary investigation has identified some potential of ancillary funding that could be obtained with further research and management resources. This list is preliminary and is in no way meant to include all possible funding sources.

- NFL Players Association (<http://www.nflpa.org/CharityWork/Grants.aspx>)  
Provides grants to football programs. Requires active or former player from region to support proposed project
- NFL Grassroots Field Grant Program  
Provides grants for development of new fields and redevelopment of existing fields in urban Towns and Cities.
- Massachusetts Community Preservation Grant (for land acquisition only)  
Grants available for land acquisition for recreation and/or conservation purposes. Town must vote to adopt Massachusetts Community preservation Act. Surcharge taxes from real estate sales funds grants.
- Framingham Department of Public Works (for Union Avenue Streetscape)  
Potential monies available for the redevelopment of the Union Ave Streetscape in front of the Bowditch Complex.
- Massachusetts Federal Land and Water Conservation Fund (P.L.88-578) (<http://www.mass.gov/envir/dcs/landwater/default.htm>).  
Provides up to 50% of the total project cost for the acquisition, development and renovation of park, recreation or conservation areas.
- Massachusetts School Building Authority (<http://www.massschoolbuildings.org/>)  
Provides percentage of funds for additions and renovations of School Facilities. Portions of the project may be eligible due to the safety concerns of portions of this facility and the Town of Framingham High School use of the stadium.
- Massachusetts Urban Self-Help Program (<http://www.mass.gov/envir/dcs/urban/>)  
Grants available to assist cities and towns in acquiring and developing land for park and outdoor recreation purposes.
- Local Initiatives Support Corporation ([www.lisc.org](http://www.lisc.org))  
Provides grants for development of new fields and redevelopment of existing fields in urban Towns and Cities.
- Local businesses and private supporter donations

### **Revenues**

The facility's main purpose is to service the community. The department has demonstrated that it is adept at working with the private markets to take advantage of potential revenue-generating events. It is anticipated that new revenue opportunities will be generated when private entrepreneurs realize the potential for cultural and athletic events. The department remains excited about reviewing any proposals that may come forth. Some advertising revenues may also be possible.

### **Economic Development**

The sponsorship of any large event on Park facilities contribute to the economic vitality of the community. It has been estimated that a single soccer tournament sponsored by Framingham United Soccer brings in approximately \$450,000 to the area economy in one weekend. Several large events hosted at this facility could have the same impact on area restaurants, malls, gas stations, and convenience stores.



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**Bowditch Athletic Complex, Framingham, MA**  
**Master Plan - Phase 1 - Bowditch & Loring Sites**  
**Opinion of Probable Costs**

March 21, 2007

Scope of Work	Unit Price		Quantity		Subtotal	Notes
<b>Buildings</b>						
Stadium Service Facilities	\$180	SF	3700	SF	\$666,000	
Maintenance Dept & Repair facility	\$170	SF	2400	SF	\$408,000	
Vehicle Storage	\$130	SF	7200	SF	\$936,000	
<b>Subtotal</b>			13300		\$2,010,000	
<b>Grandstands/Bleachers</b>						
Home Grandstands - inc. pressbox	\$300	Seat	2,373		\$711,900	Includes foundations
Elevator/Enclosed lift	\$80,000	LS	1		\$80,000	
Façade upgrades (Screen)	\$100,000	allow	1		\$100,000	
<b>Subtotal</b>			2,373		\$891,900	
<b>Site Preparation</b>						
Site Demolition						
Grandstand	\$75,000	LS	1		\$75,000	
Misc. Site Items	\$20,000	LS	1		\$20,000	Includes fencing, utilities, field lighting
Pavement demolition	\$0.6	sf	23,000		\$14,000	rounded to nearest thousand
Protect existing to remain	\$13,500	Allow	1		\$13,500	
Relocate concession stand prior to construction					NA	Town to sell structure
Relocate bus operations trailer at Loring site					NA	Bus Company's responsibility
Site Earthwork						
Bowditch	\$30,000	LS	1		\$30,000	
<b>Subtotal</b>					\$152,500	
<b>Site Improvements</b>						
Bituminous walks	\$25	sy	1,700	sy	\$42,500	
Bituminous paving	\$30	sy	1,470	sy	\$44,100	
Concrete Pads - 8" thickness, reinf	\$10	sf	1,650	sf	\$16,500	at stockpile bins
6' high Galv	\$40	lf	825	lf	\$33,000	some temporary, to be removed in later phase
Chainlink Gates - 15' wide x 6' high	\$3,000	ea	2		\$6,000	Stockpile Yard. Manual Operation
Chainlink Gates - 10' wide x 6' high	\$2,000	ea	4		\$8,000	Work yard. Manual Operation
Chainlink Gates - 5' wide x 6' high	\$600	ea	2		\$1,200	
Chainlink Gates - 3' wide x 6' high	\$500	ea	6		\$3,000	
4' high Galv	\$30	lf	40		\$1,200	
Chainlink Gates - 4' wide x 4' high	\$300	ea	2		\$600	
Ornamental Fencing -						
8' high at home grandstands	\$85	lf	70	lf	\$5,950	
8' high at Union Ave	\$85	lf	250	lf	\$21,250	
Ornamental Gates						
3' wide						
8' high at home grandstands	\$750	ea	6		\$4,500	
8' high at Union Ave	\$750	ea	1		\$750	
Public Address System	\$50,000	ls	1		\$50,000	
New monument sign and message board	\$8,000	allow	1		\$8,000	
Misc. Site Items	\$5,000	allow	1		\$5,000	includes signage, bollards, etc

Landscaping					
Union Ave Upgrade	\$20,000	allow	1		\$20,000
Interior of site	\$4,000	allow	1		\$4,000
Topsoil and seed disturbed areas	\$3.00	sf	5,000		\$15,000
<b>Subtotal</b>					<b>\$290,550</b>
<b>Site Mechanical Utilities</b>					
Water Systems	\$40,000	allow	1		\$40,000
Sanitary Sewer System	\$40,000	allow	1		\$40,000
Storm Sewer Systems	\$40,000	allow	1		\$40,000
<b>Subtotal</b>					<b>\$120,000</b>
<b>Site Electrical Utilities</b>					
Stadium Lighting	\$225,000	LS	1		\$225,000
Misc. Site Lighting	\$40,000	allow	1		\$40,000
Electrical Distribution	\$90,000	allow	1		\$90,000
<b>Subtotal</b>					<b>\$355,000</b>
<b>Subtotal Construction Costs</b>					<b>\$3,819,950</b>
+ General Contractor OH & P (6.5%)					\$248,000
+ Design/Escalation Contingency (5%)*					\$191,000
<b>Subtotal Gross Construction Cost</b>					<b>\$4,258,950</b>
- Projected Value Management savings					-\$500,000
<b>Total Construction Cost</b>					<b>\$3,758,950</b>
<b>Soft Costs</b>					
A/E Fees (2.2%)					\$83,000
PM & Clerk of Works Fee (1%)					\$38,000
Geotechnical					\$7,500
Survey					\$12,500
Owners' Contingency					\$100,000
<b>GRAND TOTAL</b>					<b>\$3,999,950</b>
* See note on Full Build Out Opinion of Probable Cost					
<b>Phase I total does not include:</b>					
Any improvements to Baseball field					
Telephone/Data					
Security Access System					
Bridge to Senior Center					
Phase 2 Improvements					
Phase 3 Improvements					
Renovation to existing Parks and Recreation Bldg.					

Includes multiple lighting levels, poles



**Bowditch Athletic Complex, Framingham, MA**  
**Master Plan - Phase 2**  
*Opinion of Probable Costs*

March 21, 2007

Scope of Work	Unit Price		Quantity		Subtotal	Notes
<b>Grandstands/Bleachers</b>						Includes foundations
Visitor Grandstands	\$270	Seat	1,730		\$467,100	
Façade upgrades (Screen)		allow			\$105,000	
<b>Stadium Subtotal</b>					<b>\$572,100</b>	
<b>Site Preparation</b>						Includes fencing, utilities rounded to nearest thousand
Site Demolition						
Grandstand	\$75,000	LS	1		\$75,000	
Misc. Site Items	\$20,000	LS	1		\$20,000	
Pavement demolition (Bowditch)	\$0.6	sf	70,000		\$42,000	
Protect existing to remain	\$20,000	allow	1		\$20,000	
Sedimentation and Erosion control	\$20,000	LS	1		\$20,000	
Site Earthwork	\$15,000	LS	1		\$15,000	
<b>Subtotal</b>					<b>\$192,000</b>	
<b>Site Improvements</b>						Drop off and portion of plaza entrance drive and island southeast lot
Bituminous walks	\$25	sy	1,939	sy	\$48,475	
Bituminous paving	\$30	sy	4,830	sy	\$144,900	
Concrete walks - 5" thickness	\$7	sf	7,650	sf	\$53,550	does not include temp fencing in phase 1
Vertical granite curbing	\$24	lf	1,200	lf	\$28,800	
Precast concrete wheel stops	\$250	ea	33		\$8,250	
Chain link Fencing and Gates						
4' high Galv	\$30	lf	60		\$1,800	
Chainlink Gates - 4' wide x 4' high	\$300	ea	2		\$600	
6' high Galv	\$40	lf	300	lf	\$12,000	
Chainlink Gates - 5' wide x 8' high	\$600	ea	2		\$1,200	
Chainlink Gates - 3' wide x 8' high	\$500	ea	2		\$1,000	
Ornamental Fencing -						
8' high at field entrance	\$85	lf	180	lf	\$15,300	
Ornamental Gates						
3' wide						
8' high at field entrance	\$750	ea	6		\$4,500	
12' wide x 8' high (track)	\$3,500	ea	1		\$3,500	
Discus cage and throwing circle	\$6,000	allow	1		\$6,000	
Shot put throwing circle	\$2,000	allow	1		\$2,000	
Relocate baseball batting cage, including electrical service	\$2,000	allow	1		\$2,000	
Misc Site Improvements Items	\$20,000	allow	1		\$20,000	includes signage, benches, ash urns (if applicable), etc.
Landscape Plantings						
Topsoil and seed disturbed areas	\$3.00	sf	7,500		\$22,500	
<b>Subtotal</b>					<b>\$376,375</b>	

4/27/2007

<b>Site Mechanical Utilities</b>				
Water Systems	\$15,000	allow	1	\$15,000
Sanitary Sewer System	\$15,000	allow	1	\$15,000
Storm Sewer Systems	\$75,000	allow	1	\$75,000
<b>Subtotal</b>				<b>\$105,000</b>
<b>Site Electrical Utilities</b>				
Misc. Site Lighting	\$20,000	allow	1	\$20,000
Electrical Distribution	\$30,000	allow	1	\$30,000
<b>Subtotal</b>				<b>\$50,000</b>
<b>Subtotal Construction Costs</b>				<b>\$1,295,475</b>
+ General Conditions, OH & P (12.5%)				\$161,934
+ Design/Escalation Contingency (12%)*				\$155,457
<b>Total Construction Cost</b>				<b>\$1,612,866</b>
<b>Soft Costs</b>				
A/E Fees (2.2%)				\$35,483
PM & Clerk of Works Fee (1%)				\$16,129
Geotechnical				\$8,000
Survey				\$0
Owners' Contingency				\$100,000
<b>GRAND TOTAL</b>				<b>\$1,772,478</b>
* See note on Full Build Out Opinion of Probable Cost				
<b>Phase 2 total does not include:</b>				
Any improvements to Baseball field				
Telephone/Data				
Security Access System				
Bridge to Senior Center				
Phase 1 Improvements				
Phase 3 Improvements				
Renovation to existing Parks and Recreation Bldg.				

***Bowditch Athletic Complex, Framingham, MA***  
**Master Plan - Phase 3**  
***Opinion of Probable Costs***

March 21, 2007

<i>Scope of Work</i>	<i>Unit Price</i>		<i>Quantity</i>		<i>Subtotal</i>	<i>Notes</i>
<b>Buildings</b>						
Vehicle Storage @ Bowditch	\$100	SF	960	SF	\$96,000	
Toilets	\$220	SF	192	SF	\$42,240	
Mechanical/Storage	\$140	SF	228	SF	\$31,920	
Ticket Booth	\$140	SF	60	SF	\$8,400	
<b>Subtotal</b>			1440		\$178,560	
<b>Grandstands/Bleachers</b>						
Baseball bleachers	\$230	Seat	326		\$74,980	Includes pad
South "D" area bleachers	\$230	Seat	500		\$115,000	Includes pad
<b>Stadium Subtotal</b>					\$189,980	
<b>Site Preparation</b>						
Site Demolition						
Bleachers	\$40,000	LS	1		\$40,000	
Misc. Site Items	\$20,000	LS	1		\$20,000	Includes fencing, utilities, Irrigation building
Pavement demolition	\$0.6	sf	85,000		\$51,000	rounded to nearest thousand
Protect existing to remain	\$20,000	allow	1		\$20,000	
Sedimentation and Erosion control	\$18,000	LS	1		\$18,000	
Site Earthwork	\$12,000	LS	1		\$12,000	
<b>Subtotal</b>					\$161,000	
<b>Site Improvements</b>						
Bituminous walks	\$25	sy	805	sy	\$20,125	
Stonedust walk	\$2	sf	9,100	sf	\$18,200	
Baseball Dugout roof structure	\$12,000	LS	1		\$12,000	
Misc Site Improvements Items	\$10,000	allow	1		\$10,000	includes signage, benches, ash urns (if applicable), etc.
Landscape Plantings						
Interior of site	\$10,000	allow	1		\$10,000	
Walnut St.	\$3,000	allow	1		\$3,000	
Topsoil and seed disturbed areas	\$3.00	sf	2,500		\$7,500	
Pedestrian footbridge over river	\$45,000	allow	1		\$45,000	
<b>Subtotal</b>					\$125,825	
<b>Site Mechanical Utilities</b>						
<b>Subtotal</b>					\$0	
<b>Site Electrical Utilities</b>						
<b>Subtotal</b>					\$0	
<b>Subtotal Construction Costs</b>					<b>\$655,365</b>	
+ General Conditions, OH & P (12.5%)					\$81,921	
+ Design/Escalation Contingency (18%)*					\$117,966	
<b>Total Construction Cost</b>					<b>\$855,251</b>	



4/27/2007

**Kaestle Boos Associates, Inc.**

## OTHER CONSIDERED OPTIONS

Several options were developed during the course of the Master Plan study. The benefits and constraints for each of them were discussed with the Parks and Recreation Department, as well as numerous other departments of the Town, including Planning and Conservation and, with town residents at multiple public input sessions. The Parks and Recreation Commission made the final determination for the direction of the Master Plan.

### Option 1- Maintenance Facility under Home Grandstands

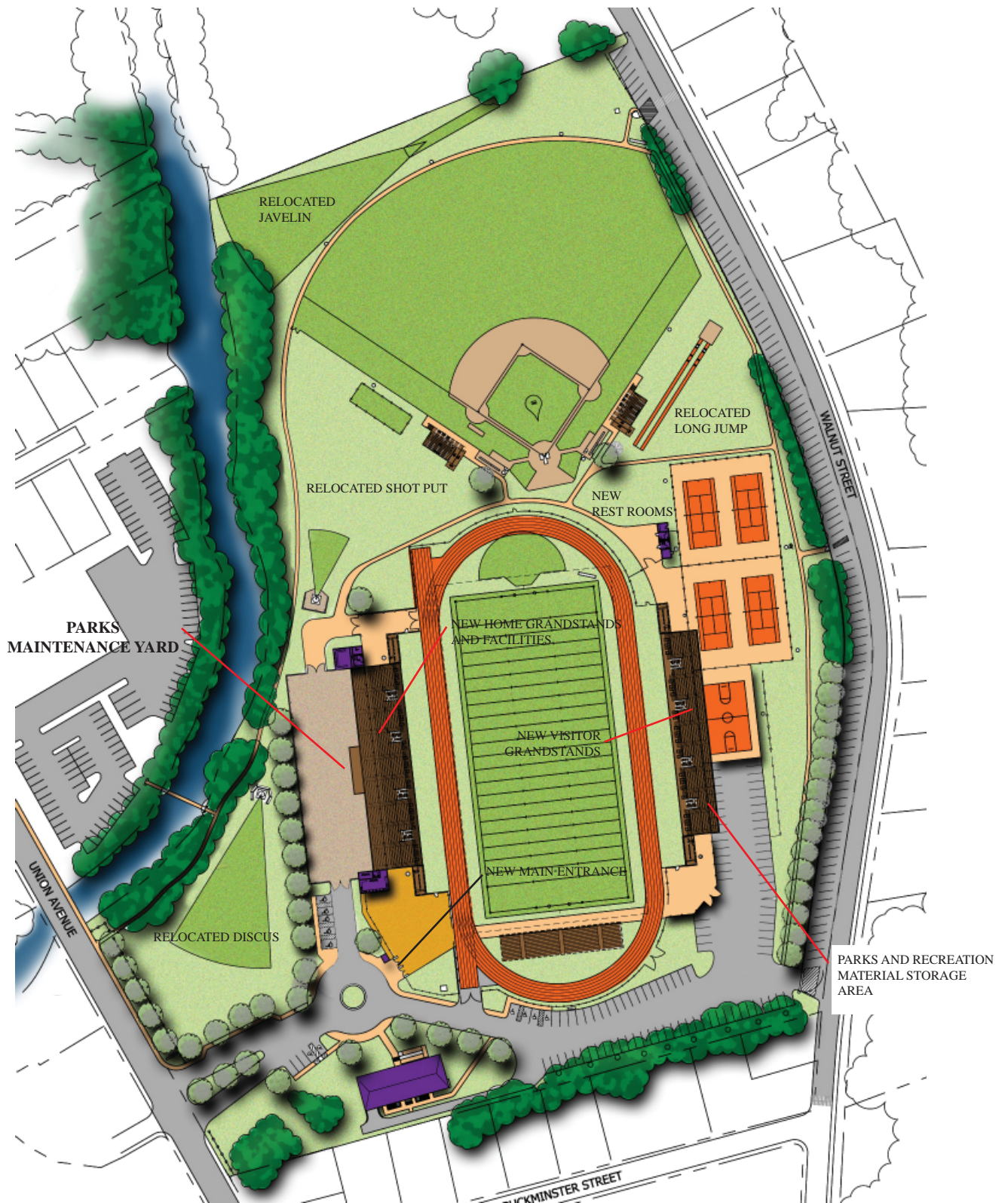
The first considered option was to improve the existing conditions and leave the basic functions of the site in the same locations they currently occupy. Many of the same improvements in the current Master Plan were made, with new grandstands, entrance and drop-off. The Park and Recreation work area, truck and material storage remains on the site, being stored under new grandstands (both home and visitor).

On the West side of the field, improvements included ornamental fencing and plants to screen a designated work yard behind the home grandstand, new HC parking by the entrance to this work yard and a new paved gathering area just inside the stadium main entrance. New structures, for team locker rooms and concession stands were proposed at either end of the home grandstand. A new maintenance building for the P&R Department was proposed underneath the press box.

On the East side of the field, a new visitor grandstand with egress tunnels and two public gathering areas north and south was proposed. The southern basketball court behind the grandstand would be removed to allow access to materials or vehicles under the visitor grandstand and create additional parking. A toilet and small concession stand building was located north of this grandstand.

Track and field events were relocated on the site as well. The high jump was placed in the northern “D” area of the track, the shot put north of the Park and Recreation work yard, and the javelin throwing area north of the baseball field. Improvements along Union Avenue and Walnut Street were to be the same as what is proposed with the adopted plan.

Disadvantages to this option include the continued mixing of Park and Recreation maintenance operations and vehicles with pedestrian uses, and the difficulty of meeting codes with vehicles stored under the grandstands. This option would require costly fire separation construction techniques to meet current codes for storing hazardous materials below a place of assembly. Also, further impact within the riverfront buffer zones would require extensive permitting.



Other Considered Option 1



## Option 2 - Walnut Street Maintenance Facility

The second considered option was to relocate all of the Park and Recreation maintenance department to the area between Walnut Street and the new Visitor's grandstands.

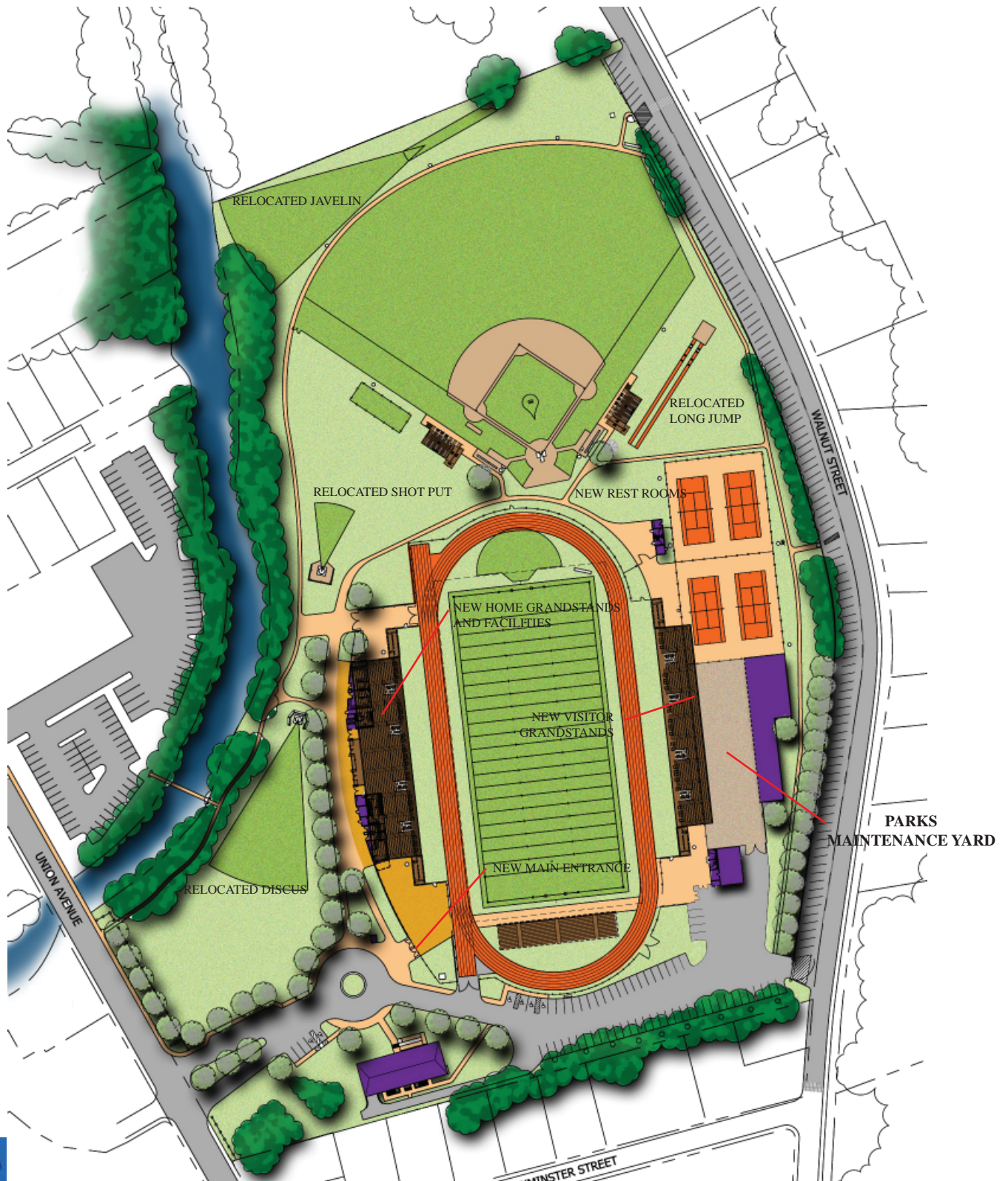
On the West side of the field, improvements were to reflect what is being proposed in the Master Plan. New Grandstands, Pressbox, structures, and walks would be identical to the Master Plan, with the exception of the placement of Field and Track events. On the East side of the field, behind the Visitor Grandstands, would be constructed the P & R work yard. This would be enclosed by a solid block or brick wall constructed between the work yard and Walnut Street, to screen the activities of the yard from neighbors across the street. This wall would be staggered with vegetation planted in pockets of the wall to diminish its visual impact of the wall. Within the work yard, enough room is provided for truck turn radius and for material stockpiling. Vehicles would be stored on the East side of the yard, against the wall, under a roof. The area not used for pedestrian circulation under the grandstand would be used for storing non-hazardous materials. A P&R maintenance building would be constructed south of the yard. This building would have had toilets and a small ticket booth to serve the stadium. A repaved and striped parking area would serve as parking for the private vehicles of P&R employees out side of the work yard, just to the south. This would have freed up parking spaces by the Administration building for visitors and park users.

Track and field events were to be repositioned as in Considered Option 1. Improvements along Union Avenue and Walnut Street were to be the same as what is proposed with the adopted plan.

The advantages of this plan would have been keeping the Park & Recreation administration and maintenance operations in one location, as is currently the situation. This would have also improved the pedestrian and vehicular traffic conflicts as best are possible, while keeping the maintenance operations on site. Disadvantages included losing the basketball courts, the impact of the new Park and Recreation maintenance facility on the adjacent neighborhood, and the service disadvantage of maintaining the incompatible uses of maintenance operations and recreation activities. Some pedestrian / vehicular conflict would still have remained.



*Perspective from Walnut Street*



Other Considered Option 2

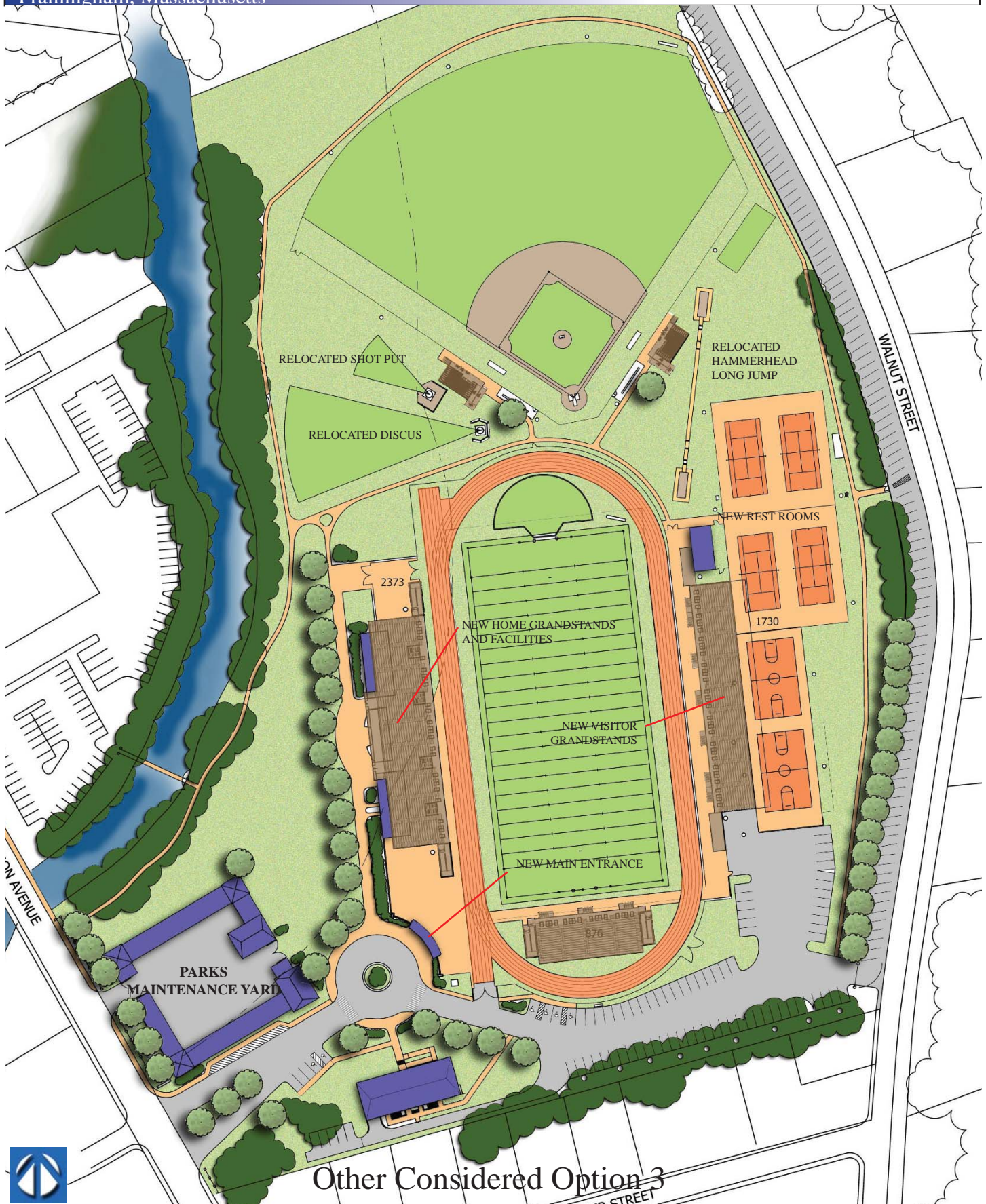


### **Option 3 - Union Avenue Maintenance Facility**

Option 3 relocated the Park and Recreation maintenance operations to the lawn area fronting Union Street. This option was briefly reviewed at the request of the Parks and Recreation Commission. The construction of a Park and Recreation work yard in this location would have put all of the maintenance in one location, directly adjacent to the administration building. The exterior walls would have been decorative, to add to the character of Union Avenue. Two access gates, one on to Union Avenue and the other towards the Stadium, would have clearly separated the work yard from the pedestrian uses. Vehicle access to Union Avenue would have been a separate entrance, unique to the Maintenance facility.

The major constraint to this proposal was the placement of the proposed building in the Riverfront buffer. A large section of the building would have been in the 100' buffer and the rest would have been in the 200' buffer. Permitting for this option would have been a significant undertaking. This option also restricted the view of the stadium and athletic complex from Union Street.





## OTHER CONSIDERATIONS

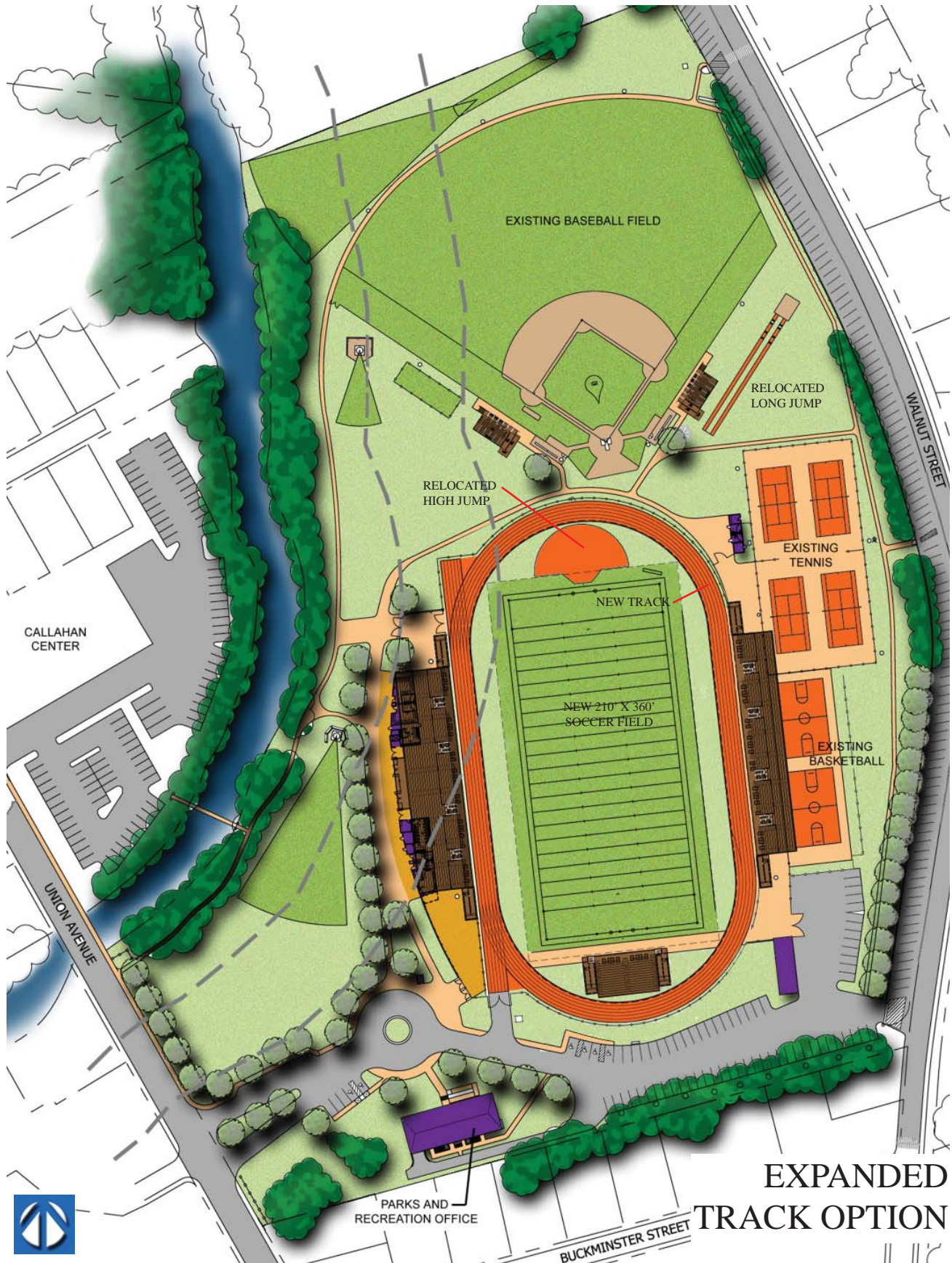
### Expanded Track

During the course of developing the master plan, it was noted that the current playing width of the soccer field inside the track is not optimal for upper levels of play. The existing soccer field is currently lined to be 180' wide with minimal run out room outside of the field. The Parks and Recreation Department Director requested that Kaestle Boos Associates investigate the impact on the site and track if the soccer field was reconstructed to provide 210' between the sidelines. Enlarging the soccer field to 210' wide would require reconstruction of the track. Currently the existing 400 meter track is an equal quadrant track (meaning that the straightaway's are the same length as the curves). To accommodate the widened soccer field, the track would have to be reconfigured to a 400 meter unequal quadrant track (curves are longer than the straightaway's) or a 400 meter broken back track (curves are made up of three arcs making the track somewhat square shaped). Due to the site constraints (ease to west) of the existing basketball and tennis courts and the river, the best track configuration would be an unequal quadrant layout (broken back track is wider). This track layout would allow the east-west distance between both straight aways on the track to increase from the current 205' to approximately 251' to accommodate for the widened field. The overall north-south dimension of the track would decrease from 579' to approximately 522'. The Master Plan currently takes this enlarged track option in to account by locating the new home and visitor bleacher locations accordingly so that they would not have to be relocated if the new track and field are implemented in the future. The distance difference between grandstands from existing to proposed is approximately 27 feet. (15 feet on home side and 22 feet on visitor side).

This new track layout reduces the number of possible bleacher seats in the southern "D" area due to the smaller area. Within the existing track, a new bleacher system would be able to accommodate 876 spectators but the new track layout would only accommodate approximately 500. If this option is implemented in the future, it is recommended that the high jump area be relocated at that time to occupy the north "D" area within the track. This will free up more area outside of the stadium for future expansion possibilities and bring another track event within the stadium confines. The location of the long jump pits could also be reconsidered at that time if deemed appropriate to also free up land northwest of the stadium for additional uses. Relocation of the high jump and long jump are included in this option as there would be an economy of scale for the synthetic track surfacing material used on these events as well as the track itself.

Accommodating for the future expansion of the soccer field did slightly impact the overall seating capacity of the stadium by limiting sized of visitor grandstands and south "D" area bleacher, but it was determined that this was a fair trade for the potential of developing a first class soccer venue.





EXPANDED  
TRACK OPTION

## OTHER CONSIDERATIONS

### Grandstand Repair in Lieu of Replacement

The option of refurbishing the grandstands was discussed at the June 15, 2005 Town Meeting. Prior to conducting the Master Plan research, the refurbishing cost was estimated to be \$300,000 more expensive than the tear down and replace option. An amendment to the main motion requiring the refurbishment of the grandstands was rejected by a vote of Town Meeting.

During the Master Plan process, informal presentations were made to the Town's Planning Board, Conservation Commission, and Historic Commission for their comments and suggestions. The Historic Commission has oversight jurisdiction on the demolition permit for the grandstand because the grandstands are over 50 years old. The stands at Bowditch are one of three sites within the Town of Framingham that are WPA-era grandstands, but it was conveyed by individual members of the Historic commission that they considered the Bowditch Facility to be a "Crown Jewel" in the town, and they would prefer to have the stands repaired rather than demolished.

Kaestle Boos Associates in conjunction with Structural Integrity Engineering Group, Inc. further investigated the renovation of the existing stands. It is Kaestle Boos' opinion that additional code upgrades for accessibility would be required beyond the initial cost of repairs. Per 521 CMR 3.3.2, any repairs to an existing structure that "exceed 30% or more of the full and fair cash value" must comply with 521 CMR: Architectural Access Board. To bring the existing stands into compliance with Access Board Regulations: at least one of the stairs on each of the grandstands would have to be replaced with an accessible ramp, the front walkway of the stands would need to be widened to meet clear travel widths, handicap-accessible seating for wheel chairs would have to be integrated into the stands, and an elevator would be required to provide access to the press box.

The stands would also be required to meet Massachusetts Building Code 780 CMR for egress. The two existing egress points (stairs @ North and South ends) of each of the stands is far below the code requirements for the egress of the seating capacity of the stands (1920 spectators per stand). Kaestle Boos Associates, Inc. ("KBA") calculations suggest that an additional seven, five-foot wide exits will be required to meet egress codes. If the lower walkway is widened for accessibility purposes, there will not be enough space between the existing track and the stands to accommodate exit stairs from the front of the stands. To incorporate the required egress, stairs will have to be cut through the stands to allow for exiting to the underside of the stands. Where walkways and exit stairs are needed, the existing block walls at the rear of the Home Stand would need to be partially removed to allow for proper exiting from under the stands.

For these reasons, it is the opinion of KBA, that by the time the access, structural, egress and other code issues are addressed, it is very likely that the existing stands will look dramatically different from the original design. Cost estimates are estimated at over \$1 million dollars more than the tear down and replace option. See opinion of probable cost below. Once repairs are complete, the Town would need to develop an "Aggressive and Systematic Maintenance Program" to keep up with the aging structure and maintain safety and usability.

The Historical Commission noted that accessibility and egress requirements might not apply if the stands are deemed a Historical Building based on Massachusetts Building Code Chapter 34. A variance may be provided if the Massachusetts Historic Commission deems the structure worthy. Then the variance must be applied for with the local Building Commissioner. Based on discussions with the current Framingham Building Commissioner, it



is very unlikely that a variance would be granted for accessibility and egress on a structure deemed an “Assembly Space” by the State Building Code. This was confirmed in writing by the Building Commissioner in a letter April 2, 2007.

The Historical Commission also suggested that the Town preserve and repair only one of the stands, and they would prefer that the Home-side stand remain. This would require a relocation of the proposed new Building Facilities from under the stands and would still require a code upgrade for the stands.

After a full review of all considerations, the proposed removal and replacement of both grandstands is still the recommended option. As the stands and stadium have been part of Framingham’s history, it is only fitting that some sort of memorial or remnant of the stands be incorporated into any new development as a permanent reminder to the citizens of Framingham. This should be carefully planned as part of the stadium renovation.

Additional notes on refurbishment:

- Assuming maintenance operations are relocated off-site, the accessory building program on the home side could be accommodated with a grandstand refurbishment program and would not impact the Rivers Act buffer area any more than the master plan improvements.
- Structural engineers warn that the provided refurbishment estimates are highly speculative and do not represent a worst-case scenario. The exact conditions of concrete are not known until repair work is undertaken and full limits of deterioration are exposed.
- Even though external refurbishing will be completed, existing rebar deterioration inside the structure is almost impossible to completely address and curtail.
- The refurbishment of the grandstand in place would not allow for the future enlargement of the athletic field for a higher level of soccer.
- There will be additional engineering costs if the Town wishes to pursue or change in this direction as we are well into the final design for the phase 1 plan.
- The grandstands are not included on the Town’s Historic Preservation List. The current list is made up of over 333 important historical structures and places.
- There would be a significant loss in seating created by the newly created egresses and ADA adaptations.

<b>Bowditch Athletic Complex, Framingham, MA</b>		
<b>Repair of Grandstands vs. New Grandstands</b>		
<b>KBA No. 06030</b>		
Scope of Work	Estimated Cost	Notes
<b>Repair/Upgrade Existing Grandstands (Home and Visitor)</b>		
Top Surface Concrete Repair	\$340,436	Based on Estimate done by Structural Integrity Engineering Group, October 2004 and adjusted by 24% escalation
Underside Concrete Repairs	\$848,815	
Replace Balustrades (sides only)	\$10,462	
Ground Floor Paving and Bollards	\$75,469	
Exterior Wall Stucco Removal and Painting	\$9,136	
Replace Existing wood seats with aluminum (visitor side only)	\$30,000	
<b>Subtotal</b>	<b>\$1,314,318</b>	Does not include contingency or Owner's soft costs
<b>Accessibility Upgrades on Existing Grandstands (Home and Visitor)</b>		Also does not include "Aggressive and Systematic Maintenance Program"
Widen Bottom Aisle	\$114,000	includes front rails
Remove existing stairs (one end) and add ramp	\$25,000	including conc. slab
Remove existing seating for new HC seating, provide HC seating	\$18,000	No structural modifications
Add elevator to pressbox (home stands only)	\$100,000	Includes masonry enclosure
<b>Subtotal</b>	<b>\$257,000</b>	Does not include contingency, general condition, soft costs or overhead and profit
<b>Code upgrades for egress on Existing Grandstands (Home and Visitor)</b>		
Remove existing structure and install vomitoriums	\$420,000	includes demolition of structure, 12 new stairs and railings and modification to home side walls at maintenance.
<b>Subtotal</b>	<b>\$420,000</b>	Does not include contingency, general condition, soft costs or overhead and profit
<b>Code upgrades for Seismic on Existing Grandstands (Home and Visitor)</b>		
Provide seismic upgrades	\$0	
<b>Subtotal</b>	<b>\$0</b>	Does not include contingency, general condition, soft costs or overhead and profit
<b>SUBTOTAL</b>	<b>\$1,991,318</b>	
<b>10% Contingency</b>	<b>\$199,132</b>	
<b>20% Design/Specifications/Bid Documents</b>	<b>\$438,090</b>	
<b>12.5% General Conditions, OH&amp;P</b>	<b>\$273,806</b>	
<b>TOTAL FOR REPAIR/UPGRADE OF EXISTING STANDS</b>	<b>\$2,902,345</b>	

<b>Construction of new Code Compliant Grandstands (Home and Visitor)</b>		
Demolition of existing stands	\$150,000	
New Steel and Aluminum Grandstands	\$1,140,000	
New Elevator to Pressbox (Home side only)	\$80,000	
<b>Subtotal</b>	<b>\$1,370,000</b>	Does not include contingency, general condition, soft costs or overhead and profit
<b>SUBTOTAL</b>	<b>\$1,370,000</b>	
<b>10% Contingency</b>	<b>\$137,000</b>	
<b>20% Design/Specifications/Bid Documents</b>	<b>\$301,400</b>	
<b>10% General Conditions, OH&amp;P</b>	<b>\$150,700</b>	
<b>TOTAL FOR NEW STANDS</b>	<b>\$1,959,100</b>	

## **Miscellaneous Items**

Additional considerations for improvements to the complex were brought forth during the Master Plan process, although they have not been included in the Master Plan. Some of these items were suggested by Town Residents, members of the Town Staff, or members of the Design Team.

### **Canoe Launch**

The Conservation Commission and the Planning Board suggested this item. A canoe launch was not included in the Master Plan due to the fact that the river bank is extremely steep on the Bowditch side of the river, and dedicated parking for the launch area could not be located near the river. There is potential that a launch may be able to be accommodated at the Callahan Center site; but it is to our understanding that this site is between two other sites being considered for launch sites, and the river distance is minimal between this site and the two proposed sites.

### **Renewable Energy Sources**

This item was suggested during multiple public presentations; the Design Team was asked to consider the use of solar panels for electricity or hot water generation. Unfortunately, in an effort to meet desired budgets, these improvements were not incorporated into the Master Plan. In no way does anything proposed in the Master Plan preclude the inclusion of renewable energy sources into any of the phases at the time of design if improvements fit within the project budget. These types of improvements should be considered during any future design phase along with any other potential energy conservation improvement.

### **Baseball Field Re-lighting**

This issue was broached during one of the Project Team Meetings by members of the Town Staff. Again, due to budgetary restraints, the re-lighting of the baseball field was not included in the Master Plan. The existing lighting levels of the baseball field should be tested for safety levels, and may warrant some modifications to the existing lights to meet safe lighting levels. Any deficiencies to lighting levels may be able to be addressed by adjustments to the existing lights on an on-going basis rather than a full replacement of the system. We recommend a lighting professional be hired to do an assessment to give the town a better understanding of deficiencies of the lighting system.

## REFERENCES

### **Dilboy Stadium Renovation, Somerville, MA**

During the Master Plan Design Phase; Kaestle Boos Associates, Inc. visited the newly renovated Dilboy Stadium in Somerville, MA. The renovation encompassed the entire Dilboy Stadium including demolition of a WPA Stadium structure and replacing it with a new 2000 seat steel and aluminum grand stand with press box. Rest rooms and storage are underneath the stand structure. The elevator to the press box and the ticket booth are at the rear of the grandstand structure and wrapped in a masonry wall. Team rooms, concession stand and maintenance/storage areas are contained in separate stand-alone masonry buildings located on either side of the grandstands. Rounding out the renovation is a new synthetically surfaced track and synthetic athletic field. The facility opened in September of 2006. The project was funded by the State of Massachusetts and then turned over to the City of Somerville to maintain. The project cost was approximately \$8 million.

### **Town of Framingham, MA – Public Safety Facilities/Parks & Recreation ADA Self-Evaluation and Transition Plan (Draft) February 8, 2006**

During the Master Plan Development, Kaestle Boos Associates, Inc. reviewed the above-referenced document to confirm that the proposed Master Plan improvements would address all deficient ADA issues related to the Stadium and Site. Since the program for the Master Plan did not include improvements to the Administration Building; none of the ADA issues relating to the building were addressed.



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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: October 4, 2006

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## **SUMMARY**

A meeting was held on **September 27, 2006** at Framingham Parks and Recreation Office

## **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Chris McGinty	Supt. of Maintenance, Framingham Parks and Recreation
Mr. Jimmy Dwayne	Division Operations Manager, Framingham Parks and Recreation
Mr. Michael Melnick	Lincoln Consultants, Project manager
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. Ken Costello	KBA

## **DISCUSSION**

The following items were discussed regarding desired program and existing uses at Bowditch Athletic Complex, not necessarily in the order presented:

- The Parks and Recreation has signup for recreation programs four times of year. Public can register on line for some programs, others require public to come into Parks and Recreation office. Public typically will begin lining up at 6 am for the summer sign ups (opens at 9 am) to ensure getting specific swimming and camp dates.
- Other youth organizations (Pop Warner, etc.) utilize Parks and Recreation offices for program sign up in the evenings and on weekends.
- Bowditch facility is also used for meeting location for Recreation sponsored trips (casinos, etc.). Travelers park their cars on site up to 3-4 days. Bus or busses pick them up. Due to the high attendance by senior citizens on these trips, the handicap parking spaces typically get filled, resulting in no HC parking for field events. This issue is currently managed by Recreation Staff. Typically there are 10 trips a year and results in 20-25 cars per event.
- Parks Department is currently renovating a building at Centennial Park and could be used for recreation program sign up and meeting/parking location for recreation trips. Issue with using building at Centennial Park for registration is that the building would have to be staffed. Security lighting would have to be addressed if Centennial Park was to be used for trip staging.
- Pop Warner group uses stadium once a year for an all day event.
- Parks and Recreation maintenance staff consisted of 14 laborers, 7 supervisors and seasonal staff. There are full time staff, seasonal (7 months) staff (approx. 10) and up to 15 summer (10 weeks) staff.

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- Parks and Recreation maintenance staff meets at Parks and Recreation office in morning (7 am) to get assignments and pick up Town vehicles and equipment. Most of staff then leaves site in morning to work at other facilities. All trucks return for 45 minute lunch and then at end of day (3:30pm).
- Maintenance staff has break room with fridge and microwave and locker room. Locker room is also used for visiting teams using stadium so maintenance staff must clean out lockers for events. Mr. McGinty noted that he would prefer his staff have permanent lockers. No air conditioning required for break room.
- Parks staff provided list of vehicles and equipment (attached). All but two of the Parks and Recreation vehicles are parked on site overnight. Three of the vehicles are parked outside due to lack of enclosed space. Two vehicles are not used on a daily basis. One vehicle is parked in maintenance building at night.
- All Park vehicles are diesels and require electrical plugs at parking locations.
- Park maintenance staff personal vehicles are parked along south property edge under existing pine trees. Approximately 20 spaces required for maintenance staff.
- Parks administrative staff personal vehicles are parked west of Parks building. Administration staff totals 8.
- Parking in front of Parks building is for visitors to Parks offices.
- Parks Department has experienced some vandalism to vehicles and equipment in the past but is not considered a major issue.
- Parks Staff originally investigated a metal building with concrete knee walls for the maintenance building.
- Existing maintenance building is heated, has electricity but no water service. Mechanic uses restrooms in Parks building.
- Existing maintenance building has an equipment lift mounted on the wall. This lift cannot be used when another vehicle is in bay. Parks trucks are typically serviced at DPW facility. Only on rare occasions does the Parks Department service their own vehicles. Parks maintenance responsible for maintaining tractors, mowers, trailers, etc. Operations include motor/hydraulic oil changes, minor welding, electrical (wiring) and general repair/cleaning/sharpening. Other equipment includes parts washer, large air compressor (needs to be in heated environment), and mig welder. Maintenance building does have some vents but not sufficient for painting. Painting does not occur in building. Vent system for painting not required for new building. Existing door is not tall enough to accept all parks vehicles. 10' wide roll up door preferred. Used oil is stored in 5 gallon buckets for recycling. Parks would prefer two bays for maintenance to allow for work on mowers and other smaller equipment when large vehicle is in bay.
- 55 gallon oil blends are stored under bleachers.
- Other equipment (hand tools, small power equipment, backhoe accessories, etc.) is stored under grandstands where headroom does not allow vehicles to be stored. Area is entire length of grandstands and is approximately 10-15' wide.
- Fertilizer and grass seed are stored off site in dry facility.

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- On-site material stockpile required for topsoil (2 tractor trailer loads max.), mulch (2 tractor trailer loads max.) and clay (3 tractor trailer loads max.). Stockpile locations should be formalized and best management practices for erosion control be implemented.
- Maintenance staff will lay out sod if left over from job, either on pavement or on tarps.
- Parks does not want to reduce seating in stadium below existing quantity (5130). Maximum number of seats for stadium to be 6000. Existing grandstand rise/run of 2.5:1 (30":12") is desired for new grandstands. Parks Staff is considering the inclusion of some upgraded, premium seating in the grandstands. Final decision to be made during phase I design phase.
- Existing grandstands have multiple flagpoles across back of stands on both sides of field. New grandstands should incorporate similar poles. A new flag pole for the American flag should be incorporated into the stadium.
- Existing sound system (bull horns only) is not adequate for stadium use (ability to play music, no microphone access to field). New system to be included in stadium improvements. System should allow for wireless microphone use on field and be able to play music. Care shall be to properly design sound system to reduce impacts on neighbors.
- Parks staff visited Westwood High School to review Dant Clayton stands. They did not like the feel of the stands. They stated that they thought the stands felt lightweight and would not last very long. They mentioned that they like the Southern Bleacher Company stands at Boston College.
- Parks Director stated that he wants to keep stadium feel and maintain seating or other facility/structure in south "D" area. Parks is not opposed to redistributing some of the south seating to the east and west sides of the field. End zone stands have been in place since 1960's.
- Site is sometimes used to host dual track meets.
- Proximity of throwing events to street and parking not the most desirable.
- No sports equipment replacement included in scope of work.
- There is a water line that is under the track and is stubbed to the southern "D" area along with two other empty sleeves.
- At a minimum, the new press box should contain the same square footage and amenities as existing press box. Existing press box is used for filming (inside, with removable/opening windows), announcer/radio broadcast location, coach's area and coaches filming area. No heat currently in filming areas, rest of box heated. Filming is done with self contained units and also feed to cable truck parked near press box. No security system in existing press box. A Security system for new press box should be considered. Parks would prefer that press box be set up so it is ready to be used at start of game and not require extensive equipment setup on game day. Radio broadcasts games via telephone lines. 3 pair of lines service site. Two to press box and one to pay phone.

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- Coordination with local building official will be needed to determine number of new restroom fixtures needed inside stadium.
- Existing concession stand is serviced by electrical and water. Food service includes coffee/cocoa, boiled hot dogs and heated pizza. No frying or grilling required.
- Town is looking into making WIFI available on site.
- Existing football scoreboard is Daktronics product. Parks would like to make controls for scoreboard wireless.
- Lightning is an issue on site. Irrigation system has been damaged twice in the past. Scoreboard damaged three times.
- Baseball program currently using portion of existing irrigation control building for storage.
- Parks requested that KBA review existing baseball lighting as part of master plan and to review for light levels, coverage and light replacement requirements and cost.
- All field dimensions, including baseball are adequate.
- Currently stadium field is used for professional soccer, High School football, girl's lacrosse and soccer. Local cable television does televise some games.
- New site light fixtures to match lighting at Centennial Park.
- Parks would prefer elevated bleachers for baseball for better sightlines. New home and visitor bleachers requested. Existing number of seats for home side is adequate. Visitor side seating capacity to match home side.
- Number of tennis courts is adequate. Keep 4 courts.
- Parks was required to install a demand meter on the electrical service that supplies the stadium lights. Town is paying \$2,800/ month for service. Parks Department wants to rework electrical services for site to reduce monthly service costs (short term issue) and simplify distribution system (long term benefit). Parks Department is meeting with NStar on October 13, 2006 at 2 pm on site to review entire system. KBA's electrical engineer to attend.
- Stadium lights set for 50 foot candles. KBA recommended that higher lighting levels be considered for filming/television applications and potential for lacrosse play. Master plan and designs to consider two lighting levels for stadium lights. Stadium fixtures were relamped last year. Town expects that existing lights to be removed and replace with newer system. Town would like a lower level lighting system appropriate for stadium security and track users.
- Stadium typically uses only one ticket booth (west) for most events. Both east and west booths used for Thanksgiving football game. Large gate at south end of track straightaway is used to gain access to stadium for most events.



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- Largest annual event at stadium is high school graduation. Parking occurs in southeast corner of site, north of baseball field outfield, lawn area at southwest corner of site. Parks staff manages parking operations. At end of event, vehicles exit site at southeast corner of the site onto Walnut St., at northeast corner of site onto Walnut Street and at main entrance on Union Street. Before event begins, traffic can be backed up on Union Street for up to a mile.
- Parks Department has requested that new site design keep parking flexible and use appropriate materials. For large events that end a one time, Staff will direct cars to double park in parking areas.
- Parks Staff noted that there may be a concern by Historical Commission regarding the removal of WPA grandstands. Plans should include salvaging of grandstand plaques at a minimum.
- At least one neighbor has issues with stadium lighting. New lighting to minimize glare and spill off site.
- Mr. Merusi noted that local neighborhood is very organized and has been a strong supporter of facility. He stated that there is a need to keep them appraised of the progress of the master plan and proposed phase I improvements. He will contact neighborhood group.
- Parks Staff stressed any new improvements should not create a vehicular cut through from Union Street to Walnut Street.
- The only reserved parking required on site at the stadium is for (1) team physician and the required number of handicap parking spaces.
- Parks Staff noted that the existing long jump and high jump events could move if necessary to allow for more flexibility on the site. Also, KBA should consider more permanent installation of throwing events. It was also noted that the basketball and tennis courts will probably require reconstruction within the next 5 years so these events could also move if needed. Mr. McGinty noted that parking along Walnut Street could also be reduced if space was needed.
- It was noted that there are conflicts (parking, events, etc.) sometimes when baseball and track events occur at same time.
- No structures shall be built on top of sewer lines.
- The Town has a bonfire in the area of the throwing events at the southwest corner of the site once a year.
- Existing fitness trail can be removed as it is in poor condition and no longer used. Replacement equipment is not required.
- Concession building should be close to stadium but be able to be used for events occurring outside of the stadium. Proper area shall be designated at concession stand to accommodate queue at service window.
- There are typically 4 school buses that park on site for football events. (See attached notes pertaining to observed site usage at a Friday night football game).
- Trash is collected in barrels at perimeter of stadium (mostly near concession stand) and then collected with Parks Department compactor truck. Any barrels within stadium are wheeled out to perimeter for collection.

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- No recycling done at stadium. Administration Office recycles paper and this is stored inside Parks Building.
- There are four memorials on site. One at southwest side of track for field lighting committee; one at southwest side of baseball infield; one at east side of tennis courts and one at west side of Parks Building. There is also a memorial plaque on side of press box.
- Parks staff has observed site users sitting on some of the memorials and electrical transformers. Better protection of these items is needed.
- Occasionally the grass throwing area at the southwest corner of the site is used for a helicopter landing site for the Hospital. This area is also used as an overflow parking area.
- Landscaping and site improvements along Union Street should be addressed. Potential to coordinate Bowditch frontage treatment with existing Senior Center treatment. Potential to include the bridge that spans Sudbury River too.
- Parks would like to have an upgraded sign. Parks has a new manual letter sign in storage. Electronic display may be an option, but Parks would have to have a rendering of proposed sign to use as a discussion tool with neighbors. May have to have sign turn off a certain time of night. Further investigation required.
- Parks would prefer vinyl coated fencing. Mr. McGinty to provide specification.
- Professional soccer teams use stadium and have stated that team rooms are inadequate. Mr. Merusi asked that KBA contact Soccer league officials to find out preferred team room amenities. Town will consider requested items/amenities but will not sacrifice program someplace else to pay for requested amenities. Contact is Mr. Joe Bradley 781-891-6900 of Mass Pro Soccer. Park staff noted that lockers are not required in team rooms for High School use.
- Officials room should provide space for 4 officials and be designed for use by a mix of men and women at same time.
- Buildings should have fire alarm system. Town does not have a central monitoring location for municipal buildings.
- Parks staff stressed that site is not just an athletic facility and that other cultural events (shows, music concerts, etc.) occur on this site.
- It was noted that the Massachusetts Community Preservation Grants do not fund rehabilitation of existing sites, only new acquisition and development. May be helpful if additional land is available in the future.
- Existing trees near baseball infield are to remain.
- Park staff noted that baseball dugouts improvements are desired. They recommended that KBA review dugouts at Clinton High School. A system that may be appropriate is Playworld System?. Dugout is an open sided, powder coated metal structure with roof.
- Town has not engaged a Surveyor or geotechnical engineer at this time. Parks Staff to forward name of local surveyor that Town has used in the past for KBA's information.

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- A Town wide master plan is currently in the development stages. Mr. Rick Taintor of Taintor Associates (978-462-0404) is producing the master plan.

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### *Notes from site observation of September 29, 2006 Friday Night High School football game:*

- Game against Newton North High School.
- Approximately 150 -200 spectators. Approximately 55 cars were parked on site, 35 of which were on the lawn/throwing areas at the southwest corner of the site and 20 of which were parked against the guardrail facing the game field. Parking within lawn/throwing area was haphazard and inefficient.
- Traffic cones had been placed on both sides of the main entrance drive to keep people from parking there. Traffic cones were also placed in the asphalt area between the field and the Parks building. This was so buses could pull up and load and unload as well as to prevent anyone from blocking drive aisle.
- Mr. Chris McGinty related a story of a HC car, seeing that the four spaces had been taken, parked on the corner adjacent to the transformer. This car blocked drive aisle and the car had to be towed.
- It was noted that there were a significant number of cars parked in the senior center parking lot, and in other parking lots along Union Street. This may be in response to easy exiting after game.
- Approximately 20 cars came in for drop-offs and made turns right in front of the field entrance. A formal turnaround may be warranted as part of new improvements.
- Band bus parked and discharged in Perini parking lot. Band warmed up in said parking lot. When the game was about to start, the Band marched across Union Street, down the main entrance drive of the Athletic Complex and onto the field.
- Football team came out of the locker room and ran on to the field for a grand entrance onto field.
- US flagpole near Parks building is not lit and partially masked by a very tall linden tree. When the band plays, everybody has to turn around to see the flag, though many can't.
- Tickets are sold from a small booth and people walk through the 20' wide gate at the south end of the track straight away to get to the bleachers. Pedestrian circulation was organized but not clearly defined.
- Once buses drop off the teams and the cheerleaders, the buses travel along the south end of the field to paved area adjacent to basketball courts and park/stack in that area. Bus parking for an average game is approximately 5 buses. Potential for up to 7 buses for big games.
- There was minimal number of spectators sitting in the visitor's bleachers.



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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: October 18, 2006

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## **SUMMARY**

A meeting was held on **October 13, 2006** at Framingham Parks and Recreation Office

## **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Chris McGinty	Supt. of Maintenance, Framingham Parks and Recreation
Mr. Jim Dwayne	Division Operations Manager, Framingham Parks and Recreation
Mr. Michael Melnick	Lincoln Consultants, Project manager
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. Ken Costello	KBA
Mr. David McKinley	KBA
Mr. Frank Kneeland	Richard D. Kimball Company ("RDK")

## **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- Mr. Kneeland provided an overview of the meeting held earlier in the day with Nstar and Parks and Recreation Staff. Meeting was held to review existing services and determine ways to reduce Town's electrical bills (from demand charges, etc.) as a short term goal and how to simplify future billing and maintain reduction in costs. Currently there are 5 or more services providing electricity to the site and buildings. Methods were identified to reduce current demand charges for track walker lighting. Mr. Merusi noted that the Parks and Recreation Office Building is also subject to demand charges due to electricity used by AC, lighting and electric heat. Mr. Merusi has requested that KBA and RDK review existing building systems to identify potential reductions in usage. Mr. Kneeland noted that Musco field lighting can be designed to provide multiple field lighting levels for practices, games and televised games. Attendees generally agreed that this should be considered during the design on Phase 1 improvements.
- Mr. McKeon reviewed the quantity of restroom fixtures required based on the current Massachusetts plumbing code. Mr. McKeon explained that RDK's plumbing engineer has contacted the Plumbing Board about the possibility of reducing the required number of fixtures. According to Mr. Dennis O'Leary of RDK the chairman of the Plumbing Board noted that the Board has issued variances for reducing the number of plumbing fixtures if historical data can be provided showing actual attendance records. Mr. Dwayne will contact School District to collect data on sport event attendance. Parks Department will compile data on blues festival and other recreation activities. Mr. McGinty noted that the biggest event is High School Graduation and there will be no way of providing historic data. Graduation is one and one-half hours long.

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- Mr. Costello gave an overview of his conversation with Mr. Joe Bradley of Massachusetts Pro Soccer ("MPS") regarding the league's required amenities in locker rooms. Notes from phone conversation are attached. Discussion ensued regarding shower facilities and whether they should be included in the new facility. KBA was directed not to include showers in the team rooms at this time. KBA to contact Mr. Bradley again to determine whether lockers are necessary or if cubbies and/or hooks are sufficient. Mr. Merusi stated that a lounge is not to be considered in the building program.
- Mr. Merusi noted that if there was the opportunity to provide flexible interior space in the building under the bleachers that would be desirable.
- Mr. McGinty noted that any vehicular circulation modifications need to accommodate tractor trailer (50'+) deliveries.
- Mr. Merusi informed KBA that he has scheduled a neighborhood meeting for October 19, 2006 at 4 pm. The meeting is to open a dialogue between the Design team and Parks Department with the neighborhood groups and provide a general overview of the planned project. He stressed that any proposed improvements are going to need the support of the neighbors when the project goes to the Town for funding and permitting.
- Mr. McGinty explained the uses of the existing storage containers on site. The four containers are used by Track Program for hurdles, pads, etc.; MPS for equipment storage; and Parks and Recreation for spare tires (large container) and for lime and field marking equipment (small container).
- Mr. McKeon explained the potential design requirements for exiting of the grandstands based on the current Massachusetts Building Code and the impact if the State adopts the International Building Code ("IBC"). The existing code requires many more exits than the IBC and since room to exit the grandstands off the front may be impossible due to site constraints, vomitoriums will be needed. The number of vomitoriums (stairs that lead back under the bleachers) will impact the potential building area available under the bleachers due to the need of walkways at the bottom of the stairs in the vomitoriums. Mr. McKeon explained that if it appears that the State is getting close to adopting the IBC, then it is plausible that a variance may be granted to use IBC exiting requirements in anticipation of adoption. KBA will research further as project is developed.
- KBA provided a sketch of a design concept for providing masonry walls at back of bleachers (attached) to create an impression or a more substantial grandstand structure. It was explained that sketch was a concept and that there are many ways to achieve this task.
- Mr. Merusi asked KBA how they select finishes for improvements. Mr. McKeon and Mr. Costello replied that KBA continues to learn of new materials through product seminars, industry conferences (I.e. Build Boston, etc.) and industry magazines and websites. KBA also visits new construction installations. Mr. Merusi noted that a new building at Framingham State was clad in an interesting metal panel.
- Mr. Costello reviewed his findings from his inspection of the Boston College football stadium. The grandstand structure was installed by Southern Bleacher Company. The stair risers are corrugated giving a

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more substantial feel to the kickboards; the decking is an interlocking deck that felt stiffer than other manufacturer's product. KBA stressed the need to get competitive bids for the improvements to Bowditch field and how it will be important to put together a specification that the Town is satisfied with.

- Mr. Costello described some of the options that KBA is investigating for site access, maintenance facility locations, etc. KBA is recommending that the recreational users of the site and pedestrians be separated from Parks maintenance operations as much as the site will allow. Mr. Merusi noted that any proposed improvements including the maintenance building/yard must be sensitive to residential abutters in the southeast corner of the site and residential neighbors across Walnut St. Mr. McGinty noted that the existing linden trees in front of the parks Building are old and some are showing signs of decline.
- Development of the north "D" area inside the track was noted as a possible location for the high jump.
- Mr. Merusi informed KBA that he needs reasonable estimates of proposed costs of phase 1 and descriptions of proposed phase 1 improvements by mid-November for Capital Planning. Mr. Merusi noted that there is little likelihood that a bond greater than \$4 million would be approved.
- Mr. Merusi noted that the Town's Board of Selectmen has recently supported other recreational and other "quality of life" improvements in the Town.
- Subsequent to the meeting, Mr. Melnick forwarded information (attached) regarding potential elevator products and information on Dilboy Stadium in Somerville.
- Subsequent to the meeting, Mr. McKinley contacted Mr. Peter Friel of the Lion's Club to get more information on concession stand use and amenities. See notes below.
- Next meetings are scheduled for:
  - **November 1, 2006 at 9:00 am**
  - **November 15, 2006 at 9:00 am**

### ***Notes from phone conversation with Mr. Peter Friel of Framingham Lion's Club:***

- Building can open both directions. Opens out toward Union Street when there are functions on the grass entrance area and during Graduation. Opens inside at all other times. They do not currently open for Baseball games but stated that if they were located near the baseball field, it might be a possibility.
- Currently, in the building, they have two Coca Cola standing soda coolers, 1 refrigerator, 2 Freezers, an electric grill for hotdogs, an industrial 2 basin stainless steel sink and a small stainless steel sink for washing hands. They have storage shelves for candy, pre-bagged popcorn (no popcorn maker), and a microwave. In the present building, they have enough space to install a grill for hamburgers but have not done so. In any new building, they would like to retain that option. Two times a year, they pull out gas grills, one provided by the Parks and Rec and the other brought from off site. These are used for hamburgers, etc.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

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Prepared by: Kenneth D. Costello

Date: November 3, 2006

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### **SUMMARY**

A meeting was held on **October 19, 2006** at Framingham Parks and Recreation Office with representative members of the adjacent neighborhoods. All Residents were personally invited by Parks and Recreation Staff. The meeting was to discuss the proposed project at Bowditch Athletic Complex and to get neighbors input on existing issues.

### **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Jim Duane	Division Operations Manager, Framingham Parks and Recreation
Mr. Bob Goodman	Resident
Mr. Steve Ryder	Resident
Mr and Mrs. Ed Lynch	Residents
Ms. Betty Muto	Resident
Mr. Michael Melnick	Lincoln Consultants, Project manager
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. Ken Costello	KBA

### **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- Mr Merusi explained KBA contract and the scope of services to be provided for the master plan and phase 1.
- Mr. McKeon described potential permitting required for the proposed improvements.
- Mr. Costello gave an overview of the site using an aerial photograph of the site.
- Neighbor suggested possibility of connecting athletic complex to Senior Center with bridge.
- It was noted that there is a preference towards open dugouts that are not below grade. This would eliminate attractive nuisance and reduce vandalism.
- It was suggested that what ever is designed is done in a way to keep maintenance to a minimum.
- Question was asked if baseball seating was to be replaced. Mr. Costello explained that in the master plan, the baseball bleachers will be removed and new seating installed on home and visitor sides.
- It was noted that there is a movement in Town to clean up Union Ave and make it less of a commercial/industrial streetscape. It was suggested that KBA consider parking in other locations than front entrance of complex.
- One resident asked whether Perini has been asked if they would consider contributing to the project. Mr. Merusi stated that no contact with Perini has taken place to date. He said he would make contact later in the project. It was noted that Perini employees do use the facility during the day.



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- Neighbors stated their dislike for the current marquee sign. Mr. Costello asked whether a lit sign would be acceptable. No objection was voiced at this time but further information was requested.
- It was noted that the existing fence along Union Street is not attractive and should be replaced.
- Neighbor who lives on Walnut Street asked whether existing access from Walnut Street was going to change. She was concerned with increase in traffic as she currently has difficulty exiting her driveway. Mr. Costello explained that KBA has looked at potentially providing access for maintenance vehicles to Walnut St. Resident was against this.
- Mr. Costello explained three potential locations for the maintenance facility (north of home stands, in lawn area near Union Ave and at existing basketball location. Neighbor from Walnut Street does not want maintenance yard near her house. Other neighbor noted that maintenance building is not appropriate on Union Street. She cited movement to beautify Union Avenue.
- Multiple residents requested that a perimeter walking loop be developed for use when track is in use and for variety of scenery. Residents suggested that the loop be constructed of various materials to discourage bicyclists, roller bladers, skate boarders and runners. Comments were made in concern to conflict between users because of different speeds.
- Residents did not have an issue with existing sports lights as all sports have regulations in place for when lighting must be shut off. It was noted that the area adjacent to the river is very dark at night. One light, east of stadium is on all night providing minimal light in the stadium.
- Resident asked that the gap in honey locust trees along Walnut Street, towards the north end of the facility, be filled in with additional trees.
- It was noted that there are no crosswalks on Walnut Street to access the facility.
- One of the residents informed KBA that the Conservation Commission has a study that was done regarding the 100 year floodplain in this area.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: November 3, 2006

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## **SUMMARY**

A meeting was held on **November 1, 2006** at Framingham Parks and Recreation Office.

## **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Chris McGinty	Supt. of Maintenance, Framingham Parks and Recreation
Mr. Jim Duane	Division Operations Manager, Framingham Parks and Recreation
Mr. Michael Melnick	Lincoln Consultants, Project manager
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. Ken Costello	KBA
Mr. David McKinley	KBA
Mr. Dan Letellier	KBA

## **COPIES:**

Attendees

Mr. Dennis O'Leary

Richard D. Kimball Company (RDK)

## **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- Mr. Costello explained that KBA's plumbing consultant has tentatively scheduled an informal presentation to the Massachusetts Plumbing Board for the end of November to discuss the requested reduction in code required toilet fixture quantities.
- Mr. Costello and Mr. McKinley explained the restrictions of the floodplain and riverfront area and how they affect the proposed project scope. The floodplain limits the amount of enclosed structure area that can be built if compensatory flood storage is not developed. Existing home grandstands, maintenance building and concession stand totals approximately 8,900 s.f. It appears at this time in the design process the new concession stand, restrooms, team rooms, maintenance facility and ticket booth will not exceed the existing area. Riverfront Area extends 200 feet from mean annual high water line of river. Impervious paving and development is restricted in this area. Because the majority of the riverfront area is already disturbed, there is allowances in the regulations to redevelop this area, but must be done with Conservation Commission approval.
- Mr. Merusi asked whether compensatory storage could be done on other Park's owned property. Mr. Costello noted that it may be an option, but it usually has to be close to impacts so storage occurs in general vicinity of project. Mr. Costello noted that Commissions have been known to mandate flood studies for large

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: November 3, 2006

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watershed areas in response to floodplain disturbance. These studies can be expensive. Mr. Merusi noted that there is a Park's owned parcel of land located on the west side of Walnut Street. The parcel appears to be within the 100 year flood plain on the FEMA flood zone map for this area.

- Park's Staff asked if there were ways to enclose vehicle parking bays in a building and still allowing for floodwater flow and not triggering "enclosed building" status. Some ideas included screen gates instead of solid doors, open screened panels in doors, etc. Further review of options to be discussed during the Phase 1 design phase.
- Mr. Merusi noted that a clear plan needs to be developed before going to Conservation Committee. Mr. McKinley explained that the Town Planner and Conservation Commission Agent recommended informal presentations to the Board and Committee to get feedback prior to Formal submittal.
- Mr. Costello went through options for site layout of program and also maintenance space plan and restrooms, concession stand and team room conceptual layouts.
- Mr. Merusi noted that he would prefer the home stands and the visitor stands to be equal in seating capacity.
- Park's staff preferred concession stand in southeast corner of the track to provide equal access from visitor and home side grandstands.
- It was noted that Parks would provide KBA with direction for the design of the concession stand interior.
- Mr. Merusi asked whether the visitor side grandstand could cantilever over the basketball courts. KBA noted that there may be height standards for obstructions over basketball courts and that KBA would research issue. If stands cantilevered over basketball, it would also do the same over tennis and may not meet tennis courts playability needs.
- Mr. Merusi asked KBA to limit grandstand length to 240' (10 yard line to 10 yard line).
- Everyone agreed that there is a need to formally separate pedestrian traffic from maintenance vehicle traffic. Mr. McGinty noted that the spring season is especially bad when track and baseball groups are arriving at the site and maintenance vehicles are returning at the end of the day.
- Mr. McGinty noted that maintenance vehicles do not enter and exit the site during main events in the stadium.
- Mr. Merusi asked if the maintenance operations could be placed under the home side grandstands and still allow for public pedestrian circulation under the grandstands. It was noted that head heights under grandstands are sufficient to allow for this circulation pattern.
- Mr. Merusi asked KBA to fully explore a building in the south "D" area in lieu of the bleachers. Building should contain public bathrooms, team rooms and officials' rooms. It was noted that all the restrooms could not be put into this building as this building may not be accessible during track events and due to the size the building would have to be to accommodate program. Concession and additional restrooms could be in southwest corner of track. Mr. Costello noted that construction within track will have additional costs associated with constructing utilities under track without disturbing track and for protection of track during construction.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: November 3, 2006

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- Mr. McGinty asked whether building in south "D" area could be prefabricated building. He noted that this may reduce construction traffic over track. KBA to investigate. Mr. McGinty noted that Wayland has a nice structure at one of their facilities.
- Mr. Merusi noted that proposed improvements must be designed for future events, not just what is occurring currently. Outlook should consider next ten years.
- Mr. McKeon asked if Parks Department has considered moving maintenance operations off site. Mr. Merusi has not discounted idea but has not identified a location with enough space to accommodate operations. He noted that such a move would erode the cohesiveness that the Department currently has. When asked if moving the Park's vehicles to an off-site location would be acceptable, he noted that there would be a loss of productivity in such a situation.
- Mr. McKeon noted that limited land area restricting parking availability and the maintenance operations on site are the constraining factors to developing the site to it fullest potential for larger events. Due to the incompatibility of recreational users and maintenance operations, flexibility in developing the site is limited.
- Mr. Merusi noted that the Town has developed parks in areas where no parks were previously and they are now highly used. He stated that if the Bowditch Complex is improved then the site would be used more.
- Mr. Duane thought the best option was to develop the maintenance operations on the east side of the visitor grandstands but that it would be the toughest sell for the public and neighbors.
- Mr. Merusi noted that if the maintenance operation is to go on the east side of the site, KBA would have to provide more than just a plan. High quality graphics would need to be developed to explain proposal.
- Mr. Merusi directed KBA to further develop two concept plans to present to the Parks and Recreation Commission at their November 28 meeting. Meeting is at 7:00 pm. Options shall show maintenance operations at east side of site and under home stands. One option should include building development in south "d" area. KBA shall present site's environmental constraints as a lead in to the presentation of the two options. KBA may also want to mention potential for maintenance operations in southwest corner of the site.
- Mr. Merusi asked if proposed improvements will trigger parking plan review by Planning Department. KBA to discuss with Planning Department. Mr. Costello noted that the main program of the proposed improvements is the replacement of existing improvements and ADA upgrades.
- Parks Department may have historic parking counts for when they manage parking during certain events. Mr. Merusi asked if improvements to the parking could be made so efficiency of parking is increased for events when Parks Staff is not actively managing parking process. KBA will address.
- Mr. McKeon explained that it is KBA's intention to develop the plan for Bowditch Athletic Complex to improve the usability of the site and serve the community in the best possible manner that the budget will allow.
- Mr. McGinty requested KBA review options to get javelin event off of football field.
- Mr. Merusi noted that any future events must take into account that the Complex is in a residential neighborhood.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

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Prepared by: Kenneth D. Costello

Date: November 3, 2006

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- Mr. Melnick noted that KBA needs to show individual parking spaces along Walnut Street, show senior center parking lots and Perini parking lots.
- Mr. Duane noted that Town CFO has notified Parks Department that November 30, 2006 is drop dead date for submission of CIP information.
- KBA to have Draft scope of work and cost estimate for Phase 1 for meeting on November 15, 2006.
- Mr. Duane asked if there was a reason for separating men's and women's restrooms into separate buildings. Mr. McKeon explained that there are some efficiencies when this is done, but can be mixed if desired. Mr. Duane was concerned with distances from seating areas to specific gender bathrooms. Revisions in options may address concerns.
- Mr. Merusi noted that specific merchandise sales area or officials meeting area is not necessary but if a multipurpose space fits into the proposed building program that would be acceptable.

Next meeting is scheduled for November 15, 2007 at 9:00am at the Parks and recreation Offices.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: November 27, 2006

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## **SUMMARY**

A meeting was held on **November 15, 2006** at Framingham Parks and Recreation Office.

## **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Chris McGinty	Supt. of Maintenance, Framingham Parks and Recreation
Mr. Jim Duane	Division Operations Manager, Framingham Parks and Recreation
Mr. Michael Melnick	Lincoln Consultants, Project manager
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. Ken Costello	KBA
Mr. David McKinley	KBA
Mr. Dan Letellier	KBA

## **COPIES:**

Attendees

Mr. Dennis O'Leary

Richard D. Kimball Company (RDK)

## **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- KBA staff presented proposed seating layouts and counts and plan options one and two. Option 1 is the development of the maintenance facility under and adjacent to the home stands. Option 2 locates the maintenance facility on the east side of the visitor stands.
- Mr. Melnick asked if column layouts for bleachers could be widened to improve efficiency of parking under grandstands. Mr. Costello responded that the spans could be adjusted but may impact cost of grandstand structure. Magnitude of impact is unknown at this time.
- Mr. Merusi asked what the roof line would be if parking was associated with the visitor bleacher. Mr. McKeon noted that the additional roofline on the back of the grandstands would be lower than the top of the stands but would have to be high enough to accommodate the Department's largest truck. Parks Staff stated that only 6 high bay spaces (14' doors) would be needed. The rest could be standard garage door heights.
- Mr. Costello noted that for purposes of permitting with the Planning Department, the informal gravel parking areas would be shown with striped parking so parking totals could be determined. Required parking totals have not been determined and will be based on final stadium seating totals.
- Park staff asked that proposed shot put location in option 2 be revised.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

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- Mr. Merusi stated that the current two options were good to be exploring but that cost must be considered also.
- The number and location of restroom facilities was discussed. It was noted that at many high school athletic events, restrooms are not close to seating areas. Restroom facility quantities must be balanced with the available budget.
- Mr. Merusi stated that the design of the grandstands must prohibit access under the stands after hours and improvements under the stands must allow for good sightlines under the stands to avoid undesirable activities.
- Park staff requested that option 2 be modified to include concession and maintenance under the grandstands and allow for use of space under visitor stands for Parks and Recreation storage.
- Park staff noted that locating the concession stand in the southwest corner of the stadium worked well.
- KBA was asked if the visitor bleachers could cantilever over the basketball court to allow for 21 rows in the grandstands or if the basketball court could be moved 10' to the east.
- Mr. McGinty would prefer changing plans to eliminate stacking vehicles under the visitor bleachers that would require backing out the entire distance of the stands. He would want access from both the north and south ends of the stands but would prefer a parking plan that would not require single file stacking. KBA noted that some space under the visitor bleachers could be head in parking with the elimination of a basketball court.
- Park staff noted that they would prefer to have a front entrance (nice aesthetic) to the stands. This would require maintenance to be on the east side of the field.
- It was noted that the proposed improvements should address the need for parking or stacking in front of the Parks and Recreation Building for program registration. Parallel or head in parking should be considered.
- Parks staff asked if the parking that is on Walnut St. at the southeast corner of the site could be eliminated and the captured land be used for a parking lot that is accessed from within the complex (from Union Ave.). KBA to review.
- KBA was directed to move bus pull off to north side of entry road.
- Park Staff noted that basketball could be reduced to 1.5 courts.
- KBA to explore revisions to Option 2 to reduce restroom facilities, potentially cantilever visitor stands and include 1.5 basketball courts.
- Mr. Merusi noted that master plan doesn't have to create a brand new facility, just replace failing amenities.
- Discussion ensued regarding developing maintenance facility off site. Mr. Merusi stated that tercentennial park is being developed as a passive park and may be able to be developed with its own maintenance facility/storage. Department does not want to separate the administration staff from the maintenance personnel.
- KBA was directed to be more aggressive at reducing the number of water closets and urinals. KBA and Plumbing Engineer consultant are scheduled to meet with State Plumbing Board on November 29.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

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Prepared by: Kenneth D. Costello

Date: November 27, 2006

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- KBA to present option 2 to Planning Commission on November 28. Presentation to include plans and elevations. Plan should maximize use of property but stay within budget.
- Park staff noted that the elimination of basketball from the complex would change the park user clientele. Basketball activities were noted as the event most likely to draw complaints from other park users.
- Concern with locating the maintenance facility on the east side (Walnut St.) side of the site in the vicinity of the neighbors was expressed. It was noted that the maintenance operations is a weekday event (7am to 3:30 pm) and should be less of an impact on the neighbors than basketball which is a weekend event.
- Phase 1 of Option 2 showed only one locker room. KBA was questioned on functionality of this. KBA explained that existing locker room in Parks and Recreation building would still be utilized until phase 2 was completed.

Next meeting is scheduled for November 22, 2007 at 9:00am at the Parks and recreation Offices to discuss opinions of probable cost for phase 1.



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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: David McKinley

Date: January 4, 2007

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## **SUMMARY**

A meeting was held on **January 4, 2007** at Framingham Parks and Recreation Office.

## **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Chris McGinty	Supt. of Maintenance, Framingham Parks and Recreation
Mr. Jim Duane	Division Operations Manager, Framingham Parks and Recreation
Mr. Michael Melnick	Lincoln Consultants, Project manager
Mr. Mike Foley	Framingham Building Commissioner
Mr. Mark Hughes	Framingham Building Commission, Plans
Mr. Ollie Gadsen	Framingham Fire Chief
Mr. Brian Mauro	Framingham Fire Marshall
Ms. Michele Grzenda	Framingham Conservation Agent
Ms. Katherine Weeks, P.E.	Storm water Engineer, Framingham DPW
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. David McKinley	KBA

## **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- KBA staff presented the option of the P&R vehicles parking underneath the Visitor grandstands.
- Mr. Foley asked if fertilizer or fuel storage would take place underneath the grandstand. Mr. McGinty stated that the fertilizer was presently kept off site.
- Mr. McGinty stated that two of the trucks carried fuel, one gasoline and the other diesel fuel.
- Mr. Foley stated that due to the different uses, the under side of the visitor grandstands would have to be min. 2 hour rated and if over 7,500 sq. ft., would have to have a 100% suppression system installed. If fuel was stored below the grandstands, there would have to be a 3 hour rating with containment on four sides.
- Mr. Foley asked about the concession stand and what it would contain. Response was that a steamer for hot dog buns and an electric cooker for hotdogs would be the extent of "cooking". Three sinks and a hand wash sink were also discussed and are included in the concession stand plan. It was agreed that the concession stand would move to the south end of the home bleachers to better serve the public during smaller events.
- Mr. Gadsen asked about access to the field and track. He stated that he would not necessarily need access to the track and field by anything other than an ambulance. He requested that a plan showing turning radii templates be submitted to insure access to the fields by an ambulance.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: David McKinley

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- Mr. Gadsen pointed out that the lawn by Walnut Street had been used by helicopters for Life Star. Mr. McKeon stated that once this had been designated, it might have to remain in place as an possible landing site even if it was no longer used.
- Mr. Gadsen stated that water suppression systems would have to be separate from domestic water supply back to the road.
- Mr. McKeon stated that a lighting plan would be done for all pedestrian walks and the possible pedestrian bridge across the Sudbury River. Mr. Gadsen stated that the Police might be concerned about access to the bridge during off hours.
- Mr. Merusi described the reasoning behind the Master Plan and the progress to Ms. Grzenda and Weeks.
- Mr. McKinley explained that the option with the P&R work yard behind the visitor grandstand would help reduce impermeable pavement in the riverfront zone and that the actual proposed buildings would be less volume than the current circumstances.
- Ms. Weeks stated that there are water cleaning systems (Down Stream Defender) that work in flooded conditions. She also stated that there are experiments and trials taking place for permeable pavements that might be considered. These would require thicker sub bases that would act as retention areas but would nullify the need for a traditional drainage system. Another solution for water infiltration and detention would be lowering the grades in parking islands so that they could store and infiltrate water. These would be considered types of Low Impact Developments (L.I.D.). There are possible grant opportunities using these systems.
- Ms. Grzenda stated that cleaning up the stock pile area and possibly thickening the vegetation buffer along the Sudbury River would be regarded favorably by the Conservation Commission. She asked that the P&R consider using concrete blocks as partitions.
- Ms. Grzenda stated that permitting would include a submission for a NPDES (National Pollution Discharge Elimination System) permit, submitting a SWPPP (Storm Water Pollution Prevention Plan) and presenting in front of the Conservation Commission. This would probably involve two meetings. Mr. Merusi suggested a preliminary meeting to present the three present solutions to get their feed back on which one would be more environmentally friendly. Conservation meets 1<sup>st</sup> and 3<sup>rd</sup> Wednesdays of each month but are already booked into February. Apply two weeks in advance to get on the docket.
- Mr. Merusi asked if he thought the team should present their present findings, including site constraints and present day issues, to the Town Council in a Town Meeting on February 13<sup>th</sup>. The team would present the three options and show that "due diligence" was being done by the Master Plan. This was agreed upon by M. McKeon and M. Melnick.
- Mr. McKeon stated that KBA would prepare graphics and verbal descriptions of the three options for the different town departments to study and comment upon.
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# **A R C H I T E C T ' S   R E P O R T**

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**BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: David McKinley

Date: January 4, 2007

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Next meeting is scheduled for January 10, 2007 at 9:00am at the Parks and recreation Offices to meet with other town officials and discuss the development of the School bus parking site.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: January 15, 2007

Revised: January 18, 2007

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## **SUMMARY**

A meeting was held on **January 10, 2007** at Framingham Parks and Recreation Office.

## **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Chris McGinty	Supt. of Maintenance, Framingham Parks and Recreation
Mr. Michael Melnick	Lincoln Consultants, Project manager
Officer Ed Burman	Framingham Police
Mr. Jay Grande	Framingham Town Planner
Ms. Mary Parcher	Framingham Council on Aging
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. Ken Costello	KBA
Mr. David McKinley	KBA
Mr. Joe Milani	KBA

## **COPIES**

Attendees

Mr. Dennis O'Leary RDK Engineers

## **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- Mr. McKeon described the proposed improvements for Option 1 (maintenance functions on home side of track), Option 2 (maintenance functions on visitor side of track) and Option 3 (maintenance functions moved off site). Mr. McKeon noted that Option 1 has been determined to be least desirable option for on-site safety and environmental constraints and is not being further developed at this time. Currently Option 3 is considering moving maintenance operations to area north of Loring Arena. Proposed improvements include: separate pedestrian and vehicular traffic; new field lighting; new grandstands; new walking path around perimeter; upgrade to landscape along Union St. Mr. McKeon explained the code issues and fire separation that need to be addressed when considering vehicular storage under grandstands. Mr. McKeon also explained potential bus parking impacts if maintenance facility is moved to Loring Arena.
- In response to Option 3, Mr. Burman noted that parking lot expansion has been done on the Keefe Tech School site that should reduce School parking on Arena property. He mentioned that expanded parking near the plumbing area is currently in the proposal state. It has gone in front of the budget committee

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

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for funding in FY 08. This is not an approved item at this time. If funded and implemented, this improvement should remove the rest of the Keefe staff and student cars parking on the Arena site.

- Mr. Burman had some comments on Option 2 and the master plan in general. He noted that there appeared to be paved parking reduction on the west side of the site. This coupled with the required bus parking of up to 6 busses on-site during a football event, will cause a parking shortage on site. He noted that a bus parking area should be developed so car parking is not lost. One consideration would be to park buses on Walnut Street in a dedicated bus parking area. This was discussed and dismissed as required turning radii could not be met and dimensions of bus parking area does not easily fit into existing parking area. Mr. Grande suggested that some of the on-street parking on Walnut St. at the south end could be eliminated and that area be captured within the Complex site instead. This may be a viable option. Further review is needed for cost and phasing implications. Mr. Burman also requested that the bus drop-off/pick up area be enlarged to allow for 2 buses to park. Mr. Burman also noted that a pedestrian crossing light (yellow flashing light only on when button is pressed by pedestrian) be considered at the main entrance on Union Ave. KBA shall show bus parking spaces on the site to show how buses and cars are accommodated.
- Mr. Merusi noted that depending on the event, Parks and Recreation have parked cars on the baseball outfield. This is not a desirable situation, but is done for rare events if needed.
- Mr. Grande noted that the modifications to the site would trigger a requirement for Planning Board site plan review and public hearing.
- KBA shall show overflow parking areas on plan, including north of the baseball field.
- Mr. Merusi noted that part of the master plan scope is to upgrade the streetscape on Union Ave. Mr. McKeon explained that it is the intention to provide similar design elements along Union Ave that have already been done at the Senior Center to create a cohesive Town complex. Mr. Merusi stated his preference that the landscape improvements along Union Ave. be done early in the project to make project more palatable to Town residents. Mr. Grande noted that there may be off-site funds available to construct streetscape upgrades before phase 1 construction begins on the athletic complex.
- Mr. Grande noted that there are streetscape improvement plans that have been developed for Franklin St. and the improvements are going to be nice. He suggested any improvements proposed for Union St. use same materials/amenities as proposed Franklin St. project. He noted that plans are available for review in Town Engineering Dept. Mr. Grande noted that the plans were done by Weston and Sampson and include crosswalk details, signal lights and bridge crossing improvements.
- Mr. Costello asked Mr. Grande on potential permitting issues relating to potential sign upgrade (likely LED programmable message board and Athletic Complex sign) at the main entry on Union Ave. Mr. Grande stated that signage is not under his purview and that there is a Sign Bylaw Committee currently reviewing existing code. He noted that description of sign does not sound like it would comply to Bylaw but then



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# ARCHITECT'S REPORT

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again, a bylaw approved sign may not be appropriate for the athletic complex. KBA to do further research with applicable Town Departments.

- Mr. Grande asked for clarification for the athletic field lighting. Mr. McKeon explained that lighting is to be replaced and that poles are likely to be higher than existing and the eight poles will be replaced with four. Mr. Grande asked about potential impacts on neighbors. Mr. McKeon noted that the higher poles allow for better controlled lighting and that a photometric plan of light levels will be provided. Mr. Merusi noted that his Department has a good relationship with the neighbors and that the current lighting has not been an issue with the neighbors.
- Mr. Grande stated that positives of proposed options include reduced pavement and accessible improvements. He did note that the Planning Board will be looking at snow storage, trash enclosures/dumpster, parking and drainage during their review. He recommended an informal presentation to the Planning Board and the Conservation Commission.
- Mr. Merusi asked Mr. Grande if the Planning Board would have any comments on the potential of moving the maintenance facility off site. Mr. Grande stated that they Board should not have any issue with proposed relocation.
- Mr. Grande asked a general comment on how the closing of the Main St. Bridge impacted traffic patterns on streets around Complex. No one had specific information on impact.
- Mr. Grande noted that on-street parking on Walnut St. does not comply with current parking regulations because drivers must back into traffic to exit spaces. Mr. Costello noted that condition is existing and no plans to modify have been developed. Mr. Grande stated he understood but that it will probably be mentioned in the Planning Board meeting.
- Mr. Grande recommended inclusion of a pedestrian crosswalk at the northeast corner of the site across Walnut St.
- KBA was notified that there is an existing crosswalk across Walnut St. at the east end of Buckminster St. that should be shown on our plans.
- Mr. Merusi stated that if the maintenance facility is moved to the Arena site, there are greater possibilities for training/learning opportunities with Keefe Technical School students.
- At this time Mr. Grande and Mr. Burman left the meeting.
- Mr. Merusi requested KBA to provide information on the maximum sized soccer field that could be located within the existing track if grading was not a factor. Mr. Costello responded that this information can be provided once the completed existing conditions survey is received.
- Mr. McGinty asked if a small public restroom facility could be incorporated into the maintenance building (option 2, Phase 1) in lieu of the small building in the northeast corner of the stadium. He suggested that northeast building be constructed in later phase. KBA to revise layouts.
- At this time Ms. Parcher joined the meeting.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

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- Mr. Merusi and Ms Parcher described the current operation of the Senior Center. Center has 100 parking spaces and is currently open between 8 am and 5 pm. The second floor is to be renovated into usable space in the near future and a large assembly/function room is to be renovated after that. It is likely that more off hour events will be held at Senior Center when renovations is complete.
- Parking overflow for Senior Center trips occurs in the lawn area in the southwest corner of the athletic complex.
- Ms. Parcher asked if the proposed restrooms would be available for senior's use during off hours when trips are departing from the site. She stated that even if one unisex water closet was available after hours for emergencies that would be helpful. Mr. McKeon informed Ms. Parcher that all restroom facilities will be handicap accessible. Potential for after hour's access will be discussed with Parks and Recreation during final design of facilities.
- Mr. McGinty noted that parking overflow area (southwest lawn area) cannot be used in spring due to conflict with existing shot put. He recommended relocation of shot-put so southwest area adjacent to Union Ave would not be used for track events.
- Ms. Parcher asked whether an earthen berm could be used to screen maintenance operations from Walnut St. Mr. Costello noted that there may not be enough distance to effectively do this. KBA to review.
- Ms. Parcher stated that a pedestrian bridge from athletic complex to Senior Center would be a good idea. Mr. McKeon noted that this would allow for another means of pedestrian egress/access to both sites.
- Mr. Merusi noted that a Town wide ADA study has been completed for all Town owned facilities including Bowditch Athletic Complex. Mr. Costello was directed to contact Building Commissioner for report pertaining to facility.
- Mr. Merusi directed KBA to modify conceptual plan for maintenance facility at Arena site to allow for parking of 45 buses, maintain bus operations building, relocate maintenance to east side (towards field) of lot and label inline skating area as "potential skate park or improved athletic field")
- KBA to revise option 3 and send to Mr. Merusi for additional comments.
- KBA to label all improvements on plans and provide reduced size plans to Mr. Merusi.
- Mr. Merusi noted he is expecting some Town Selectmen, along with general public at the January 25, 2007 Parks and Recreation Commission meeting. KBA to present plan options at this meeting.
- Mr. McKeon stated that KBA would have stadium sections and elevations to show at the 1/25/07 meeting along with the plans.
- KBA also to present master plan progress report at Special Town Meeting on February 13, 2007.

Next meeting is scheduled for January 25, 2007 at 7:00 pm at Parks and Recreation Commission meeting. Location to be determined.

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# ARCHITECT'S REPORT

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**BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: January 15, 2007

Revised: January 18, 2007

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: March 2, 2007

Revised: March 5, 2007

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## **SUMMARY**

A meeting was held on **February 28, 2007** at Framingham Parks and Recreation Office.

## **PRESENT**

Mr. Robert Merusi

Director, Framingham Parks and Recreation

Mr. Jim Duane

Division Operations Manager, Framingham Parks and Recreation

Mr. Chris McGinty

Supt. of Maintenance, Framingham Parks and Recreation

Mr. Michael Melnick

Lincoln Consultants, Project manager

Mr. David Brosnan, P.E.

Structural Integrity Engineering Group, Inc.

Mr. Ken Costello

Kaestle Boos Associates, Inc ("KBA")

Mr. Joe Milani

KBA

## **COPIES**

Attendees

## **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- Mr. Merusi explained that he has had informal discussion with Historic Commission members and that they expressed concern that the existing grandstands are to be demolished. Mr. Merusi stated that he did not check to see if the historic commission would have any issues with the proposed improvements/demolition until recently. He noted that it is his understanding that the Historic Commission has jurisdiction over any building over 50 years old. Mr Costello read aloud the Town Bylaws (Article VII, Section 5) describing the Historic Commission's Power and Duties and it does not clearly state their jurisdiction for buildings over 50 years old. *Subsequent to the meeting Mr. Merusi emailed information clarifying Historic Commissions involvement with proposed demolition of buildings older than 50 years old. Town Bylaw pertaining to this jurisdiction is in By-Law Appendix 9 – Demolition Delay by-Law/Historic Districts (Article V, Section 17A).*
- Discussion ensued regarding the existing grandstands and to what extent they would have to be repaired to address structural concerns if the stands were to be saved instead of demolished. Mr. Brosnan noted that the investigation that he did in 2004 did not include destructive testing or chemical analysis of the concrete. Both of these would have to be done to assist in developing a more refined scope of work for repair. Mr. Brosnan noted that even with this level of testing, some repair would not be evident until actual work is performed and could result in major change orders if a significant contingency or "an open checkbook" is not considered for the project. Mr. Brosnan noted that the construction of the existing stands was not the most efficient means to construct the structure and was very labor intensive, which is likely why the stands were

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: March 2, 2007

Revised: March 5, 2007

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built in this fashion as it was the WPA's mission to employ as many people as possible. Any repairs to the structures will also be very labor intensive and therefore costly.

- Mr. Costello noted that on top of the repair work required to make the stands safe, there are State codes that would be triggered by the cost of the repairs. When repair work exceeds 30% of assessed value of the structure, then the structure must be brought up to code for accessibility. This would require accessibility to press box and seating areas, which would require ramps, an elevator and enlarging the front walkway. Handicap seating would also need to be made be added to the stands, which would require removing seats and potentially grandstand structure to accommodate. When repair work exceeds 50% of the assessed value, the structure also has to comply with current seismic codes, which would require additional structural work. Also, regardless of cost percentage, the stands would have to be made to meet current egress codes which would require the removal of existing structure to add vomitoriums to egress from the stands. All of these code upgrades are significant and will in turn change the appearance of the existing structure and add significant cost to the repair of the existing stands. KBA was also addressing the items from the town wide ADA report as part of the proposed removal and replacement of the stands along with the new improvements. Repair of existing stands will not address ADA issues associated with exist locker rooms and restrooms. Because of the estimated value of repair on the existing bleachers, the entire Bowditch complex may need to be upgraded to meet ADA/AAB regulations, including the Parks and Recreation Administration Building.
- Mr. Merusi asked for a 2-3 page summary of all of the required repairs and code upgrades to present to the historic commission. He also asked for a side by side comparison of costs to repair and upgrade the existing stands to removing and providing new stands. KBA will prepare the summary and forward to Mr. Brosnan to comment/amend.
- Mr. Merusi stated that he has not scheduled a date for formal review by the Historic Commission.
- Mr. Brosnan noted that the Building Commissioner could condemn the stands if they deteriorate too far. Mr. Merusi noted that that has not occurred.
- Mr. Brosnan stated that if the structure has to be removed to accommodate vomitoriums, it would have to occur in 13' sections due to the existing structure and construction type.
- Mr. Merusi stated that the Parks Department has spent more than \$250,000 on repairs to the home stands in the past 10 years.
- Mr. Brosnan stated that the cost for testing should be borne in the cost estimate for repair. He also stated that the longer it takes to do all of the repairs the less structural load the stands will support and more and more of the stands will have to be cordoned off from use.
- *At this time the discussion of the existing grandstands was concluded and Mr. Brosnan exited the meeting.*
- Mr. Merusi told the meeting attendees that the Parks and Recreation Commission selected Option 3 (maintenance facility off-site) as the preferred option at their meeting on February 27, 2007.



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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: March 2, 2007

Revised: March 5, 2007

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- Mr. Costello informed the attendees that KBA has been working on cost comparison of Option 2 and Option 3 and they do not see a significant difference in cost. He also noted that at the current time KBA's opinion of probable cost exceeds Mr. Merusi's stated budget of \$4 million for Phase 1 improvements. Some items affecting the cost (some not in earlier estimate) are the addition of screening on the back of the visitor grandstand and higher cost estimates from grandstand manufacturers. Mr. Costello said that KBA can develop a more refined cost estimate now that the preferred option has been selected. Mr. Merusi noted that \$4 million is the upset limit for Phase 1. Mr. Melnick stated that if the proposed improvements exceed the proposed budget then hard decisions would have to be made, including the potential not to do both the Visitor and Home grandstands in phase 1.
- Mr. Merusi stated that by statute, the State Legislature must approve the construction of buildings on existing parklands, of which the Loring site is one. Mr. Merusi indicated that the Town Meeting should first approve of the construction of the maintenance facility on Park & Recreation property and then the request should be made to the State for formal approval by the Legislature. Mr. Merusi seeks to have Town Counsel prepare the document to initiate this process.
- Mr. Merusi stated that the last thing he wants to do is have a project designed that cannot be built for the budget available.
- Mr. Merusi requested that the master plan be completed before the April Town Meeting (second week of April) for presentation and budgeting purposes.
- Mr. Milani stated that building materials/construction techniques for the maintenance buildings may also be a means for reducing cost impact. Mr. Merusi would prefer block or brick for portions of the maintenance building if possible. Mr. McGinty noted that the construction type of the existing Town Public Works building may be an appropriate type of structure for the maintenance building. KBA to visit building.
- Mr. Merusi noted that he reduced KBA's last invoice because he has not seen the draft master plan document. Mr. Melnick suggested that KBA forward what has been completed to date.
- Mr. Melnick discussed his proposed schedule for the development of Bid Documents for Phase 1 and said that the Town's authorization to proceed needs to be forwarded to KBA soon to meet the proposed bid timeframe in July. He also noted that geotechnical work needs to be done at both sites to develop proper construction plans. Mr. Costello also noted that limited surveying will also be needed at the Loring Arena site for development of the bid documents for the Maintenance facility. KBA to solicit proposals for geotechnical and survey services. Mr. Merusi noted that all field work schedules for geotechnical work must be coordinated with Parks Department as not to disrupt bus operations. Weekend work may be warranted.
- Discussion ensued on how the work at both sites would be bid. It was suggested that the two sites be bid separately. Further discussion and refinement of details is warranted during development of Phase 1 bid documents.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: March 2, 2007

Revised: March 5, 2007

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- Mr. Merusi noted that he wants to keep approximately 50 buses at the Loring site but KBA's Design should also take future expansion into consideration in regards to building construction. Expansion options should include added bays and outside storage.
  - Mr. McGinty noted that the maintenance facility might be designed to also accommodate expansion for public restroom facilities and other services for adjacent fields. Mr. Merusi stated that that program may be able to be addressed with proposed plans for facilities by sports groups or in Loring Area renovations.
  - Mr. Milani discussed potential materials for the maintenance buildings including single pitch, standing seam roofs with low pitches and prefabricated structures with clear spans inside bays. Mr. Milani was directed to contact Mr. McGinty to schedule a meeting to discuss specific program for maintenance facility.
  - Mr. Costello went through presentation materials for Conservation Commission and Planning Board meetings scheduled for later in the evening. Notes from both informal presentations are below.

Next meeting is scheduled for March 7, 2007 at 8:30 am at Parks and Recreation building to further discuss Phase 1 costs and scope.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

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Revised: March 5, 2007

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### COMMENTS RECEIVED FROM INFORMAL PRESENTATION OF OPTION 3 TO CONSERVATION COMMISSION

- Town has restrictions in place pertaining to invasive materials used for erosion control. Only Salt Marsh Hay bales or Straw Waddles are allowed.
- Was a canoe launch considered in the plan? Commission members noted that a launch was supposed to be installed on the Callahan Center Property when the building was originally permitted and constructed. It was noted that bank slopes are very steep on Bowditch side of river.
- Work within riverfront buffer zone must clearly show benefits/improvements to be justified.
- Formal submission of Construction Documents will be required.

### COMMENTS RECEIVED FROM INFORMAL PRESENTATION OF OPTION 3 TO PLANNING BOARD

- What is proposed for Streetscape along Union Ave.? Mr. Costello stated that proposed improvements are to be complimentary to existing Callahan Center improvements.
- Sign regulations may prohibit a message board.
- Reinforce the visual presence of Union Ave bridge and highlight river.
- Was a canoe launch considered in the plan? One was included in the initial permitting of Callahan Center building.
- Board will want Tainter Associates to review Master Plan to ensure plan is consistent with Town wide plan.
- Board chairwoman was not sure if improvements would trigger Planning Board review. Mr. Jay Grande stated that he would review issue with Zoning Board Official and Conservation Commission Official to make a determination. He noted that there are no use changes and parking is to remain in current locations and quantities.
- KBA should consider orientation and location of pedestrian bridge. Later it was stated by other Board members that location/orientation is good.
- Additional river overlooks should be considered. i.e. Charles river in Watertown.
- Consider modification to Walnut St Parking to make more aesthetically appealing. Consider periodic ground plane improvements. Consider 90 degree head in parking.
- Residents along Walnut have mentioned lack of security/street lighting along park property when stadium lights are off.
- Consider upgrading landscape buffer between park and residential properties to south of park, especially behind parks building.
- Consider irrigation at streetscape at Union Ave.
- Consider use of pervious pavement.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: March 2, 2007

Revised: March 5, 2007

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- What is budget and timeframe? Explained phase 1 may begin in fall with construction of maintenance building. Phase 1 cost approx. \$4 million. Mr. Merusi explained that KBA to provide ideas on other funding sources.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Joe Milani

Date: March 5, 2007

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## **SUMMARY**

A meeting was held on **March 5, 2007** at Framingham Parks and Recreation Office.

## **PRESENT**

Mr. Chris McGinty

Mr. Joe Milani

Supt. of Maintenance, Framingham Parks and Recreation

Kaestle Boos Associates, Inc ("KBA")

## **DISCUSSION**

The following items were discussed regarding the programming needs for the new Maintenance Garage at the Loring Arena site and Bowditch Athletic Complex site, not necessarily in the order presented:

## **LORING ARENA SITE**

### **STAFF BUILDING**

#### Locker Room:

- Lockers for 20 persons
- 24x24x60" with flat top, not changing at locker.
- Separate recharging area needed for batteries (on counter)

#### Lunch Area/Meeting Area:

- Informal meeting/Roll call for 30+ persons in Summer
- 6' tables with stackable chairs
- Kitchenette – Base/wall cabs with sink, fridge and micro (counter)
- Water bottles and dispenser
- Computer location for future use.

#### Toilet Rooms:

- Mens – 1 toilet/1 sink/1 urinal
- Womens – 1 toilet/1 sink
- Shower – 1 Unisex prefab
  - Changing area
- Tile floors all toilet areas



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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Joe Milani

Date: March 5, 2007

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### Office:

- 3 @ 9x12
- Desk with return
- 1 lateral file 2 drawer
- Bookcase 4'

### Storage Room:

- 10x12, walls with shelves for paper goods, etc (no fuel storage)

### Laundry:

- Washer/Dryer – to be relocated from existing
- Provide gas service
- Storage shelves
- Drying area
- Big slop sink for washing off equipment (mop heads, suits, gloves)
- Should be near entrance

### MAINTENANCE GARAGE

- Existing Garage: 40x20x10'-8" high
- Provide 12' wide doors
- Provide high bay doors for tall vehicles
- Provide high head clearance (C McGinty to provide height of vehicle)
- Portable lift for equipment with Compressor.
  - Provide airlines for compressed air at parking bays for tires
- Oil in 55 gal drums (3)
  - Collection grate below drums
  - 5 gal pails for disposal
- All washing of vehicles will be outside (primarily at DPW site)
- Long countertop
- Storage shelves (see photos)
- Storage hooks (see photos)
- Existing in maintenance shop – may be re-used – allow space for (see photos):
  - Drawer cab: 5w x 5d x 30"h
  - Work bench: 10w x 3d x 4h
  - Wood shelf: 4w x 18"d x 5'h
  - Steel Shelf: 32"w x 70" h
  - Screw drawers: 3w x 10"d x 39"h
  - Bins/tools: 3 x 2
  - Table: 30"w x 6d
- Provide pull down task lights
- Provide connecting doors to Locker Area and parking bays

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Joe Milani

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### PARKING BAYS

- Provide 12' wide doors
- Provide one high bay doors for tall vehicles (C McGinty to provide height of vehicle)
- Provide high head clearance (C McGinty to provide height of vehicle and how many and which bays)

### EXTERIOR

- Provide sliding gates
- Concrete block bays for site materials
- 12'x40' for mulch (25 yards capacity)
- 12'x40' for soil (25 yards capacity)
- 20'x40' for clay (45 yards capacity)

## **BOWDITCH SITE**

### VEHICLE GARAGE

- 60' x 24' approx. size
- 4 vehicle bays with 12' wide doors , 1 high bay (CMcGinty to define)  
Use 3 bays for pickup trucks, 1 bay for mower and power rake storage
- Provide slop sink
- Access to toilet rooms attached (from outside)

⇒ KBA needs to locate where Track equipment Baseball equipment will be stored on site.

Next meeting is scheduled for March 7, 2007 at 8:30 a.m. at the Parks and recreation Offices.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: March 13, 2007

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### **SUMMARY**

A meeting was held on **March 7, 2007** at Framingham Parks and Recreation Office.

### **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Jim Duane	Division Operations Manager, Framingham Parks and Recreation
Mr. Michael Melnick	Lincoln Consultants, Project manager
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. Ken Costello	KBA

### **COPIES**

Attendees

Mr. Chris McGinty	Framingham Parks and Recreation
Mr. Dennis O'Leary	RDK Engineering

### **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- Mr. Melnick distributed the Town of Framingham Building Demolition Permit application form. He also explained the process for filing the permit. Board of Health and Building Inspector must review application. Mr. Melnick explained that a proof of rodent control has been done, that structure is clean of asbestos and that the water and sewer are shut off. No one was sure if permit could be submitted (without rodent control and utility shutoff) to start the Historical Commission review even though demolition is not expected for another 7-8 months. Mr. Merusi directed Mr. Melnick to follow up with building department to get clarification. Mr. Merusi wants to hold off submission of demolition permit application until after Historical Commission presentation (scheduled for March 15, 2007)
- Mr. Merusi explained that he has had additional discussions with Historical Commission Chairman about the existing grandstands and he was informed that the grandstands are considered historical and are listed on the Historical Designation Plan. According to Mr. Merusi, the Chairman stated that the demolition will likely be held up for a 12 month review. Mr. Merusi has obtained a copy of the Town of Framingham Historical Designation Plan. Mr. Duane will review the Plan to determine applicability.
- Mr. Merusi outlined his preference for the Presentation content for the Historical Commission meeting. First item would be to explain that original intention *was* to refurbish existing grandstands. Secondly a structural integrity report was done to begin refurbishment project. Results of investigation/report noted extensive, costly repair required. Third, Parks and Recreation has long track record of being sensitive to the historical significance of improvements in parklands and has incorporated aspects of historical meaningful items into the design of new improvements. Next Mr. Merusi wants the Department's consultants to define the

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: March 13, 2007

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issues/needs for refurbishment of existing stands, including cost implications. Lastly Mr. Merusi would like to open up dialogue with Commission to discuss potential ways to memorialize grandstands without keeping the structures.

- KBA was directed to inform Mr. David Brosnan of Historical Commission Meeting time and date.
- Mr. McKeon and Mr. Costello discussed proposed master plan improvements and opinion of probable cost. Draft copy of opinion of cost was distributed. Mr. McKeon noted that the opinion of probable cost at this time is over the stipulated budget and that KBA is continuing to revise the numbers as more scope is refined. Mr. McKeon noted that there may be some means of lowering the cost of development at Loring Arena site but will need to be worked out with Chris McGinty on requirements for vehicle storage. He noted that Mr. Milani met with Chris on Monday to define the program at Loring and that information was being processed. Mr. Merusi asked if some of the storage can consist of just roof to reduce cost. Other considerations brought up included deferring some of the maintenance building to a future phase (perhaps the 4 bay garage at Bowditch and a couple of storage bays at Loring), deferring the visitor grandstands to phase II and the stadium lights (installing only the bases and conduit in phase I). Other items affecting the budget include rising grandstand costs. Mr. Costello explained that KBA has received revised costs from one manufacturer that shows a healthy increase in the cost per seat. KBA is reviewing with other vendors for confirmation of the market.
- Mr. Melnick asked if the replacement of the visitor bleachers should be deferred to phase II, including the demolition of the existing stands. After lengthy discussion, Mr. Merusi stated that new visitor bleachers should be included in Phase II. The demolition of existing visitor bleachers will also be in phase II as to provide potential "swing space" if for some reason the new home stands are not online for first events in fall of 2008.
- It was determined that Phase I shall include Home Grandstands, support structures under stands, the Loring maintenance facility, stadium lights, relocation of shot put and discus, new marquee entrance sign and Union Ave streetscape upgrade. Depending on cost estimate results during the construction design phase, KBA may consider adding visitor bleachers as an alternate.
- Mr. Costello noted that master plan should not include relocation of high jump or long jump as the cost for these would be at a premium for the synthetic track surfacing (due to limited amount). He suggested that they be included in the "other consideration" phase of track reconstruction. No objections were voiced. KBA to revise Master Plan.
- Mr. Merusi noted that he would like Phase II to not to exceed \$1.5 million. Phase II shall include south "d" area bleachers. Bleachers shall be designed to work with expanded track configuration.
- Mr. Duane noted that Phase I has to be done well so that the residents of Framingham will want to continue with a Phase II.
- Mr. Merusi noted that he needs the phases defined and final master plan and budgets completed for April Town Meeting. KBA to complete master plan by end of March. Draft copy of master plan shall be sent to Messrs. Merusi and Melnick prior to next team meeting on March 21, 2007.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: March 13, 2007

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- Mr. Merusi will schedule a meeting to discuss the potential streetscape upgrades to Union Ave. Meeting to include KBA and Parks Staff and invited Town Staff.
  - Mr. Merusi reminded KBA that they shall address alternate source of funding for proposed master plan improvements. He will forward information he is expecting from the NFL Association. Other sources to investigate include DPW/Planning and conservation/recreation.
  - Mr. Merusi wants KBA to consider streetscape enhancements to Union Ave. bridge. Some thoughts include cleaning of bridge structure and pruning of vegetation to highlight river and Bowditch views.
  - Mr. Melnick noted that KBA needs to receive authorization to proceed with Design of Phase I if the current proposed schedule is to be met. Mr. Merusi verbally authorized KBA to proceed. KBA to begin with design of the Loring Maintenance facility.

Next meeting is scheduled for March 21, 2007 at 9:00 am at Parks and Recreation building.



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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

KBA # 06030

Prepared by: Kenneth D. Costello

Date: April 5, 2007

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## **SUMMARY**

A meeting was held on **March 21, 2007** at Framingham Parks and Recreation Office.

## **PRESENT**

Mr. Robert Merusi	Director, Framingham Parks and Recreation
Mr. Chris McGinty	Supt. of Maintenance, Framingham Parks and Recreation
Mr. James Duane	Operations Manager, Framingham Parks and Recreation
Mr. Michael Melnick	Lincoln Consultants, Project manager
Mr. Michael McKeon	Kaestle Boos Associates, Inc ("KBA")
Mr. Ken Costello	KBA
Mr. Joe Milani	KBA

## **DISCUSSION**

The following items were discussed regarding the proposed improvements at Bowditch Athletic Complex, not necessarily in the order presented:

- Discussion ensued about the questions that were brought up at the informal presentation to the Historic Commission. Mr. Merusi noted that the Master Plan will need to address Historic Commission concerns.
- Mr. McGinty asked whether anyone knew if Dilboy Stadium was considered historical. He believes the original stadium was a WPA project. Mr. Melnick offered to contact the Architect that worked on the new stadium to find out specifics.
- Mr. Merusi asked KBA to put together a fee and scope proposal to address concerns and requests of Historic Commission. Proposal should include cost for developing a new master plan for displaced facilities that were supposed to be constructed under the new stands. The proposal should also explain potential delays to the project due to the redesign and permitting required for additional site development and estimated construction cost impacts. Proposal should define anticipated upgrades to the stands, required testing, inspection services, and code requirements. All design and testing fees are to be clearly stated.
- Mr. Melnick asked if the demolition permit should be submitted at this time. Mr. Merusi stated that he wishes to wait until after town meeting to submit permit.
- Mr. McKeon stated that KBA will do some research on precedence of WPA grandstands preservation in the United States.
- Mr. McKeon noted that there are historical consultants that investigate and report on structures and whether they are significant and worthy of preservation. Mr. Merusi directed Mr. McKeon to make contact with such consultant and get a proposal for his review.

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# ARCHITECT'S REPORT

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## **BOWDITCH ATHLETIC COMPLEX**

Framingham, MA

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Prepared by: Kenneth D. Costello

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- Mr. Merusi noted that there are currently 3 WPA stands in town and that the stands in Butterfield Park are in the best condition and should be the ones to be saved.
- Mr. Merusi directed KBA to write a letter to Framingham Building Commissioner to get a ruling on Chapter 34 applicability and whether or not repaired grandstands would have to meet current ADA and egress codes.
- Mr. Milani explained KBA's interpretation of Chapter 34. KBA believes repair of stands would trigger ADA and egress upgrades. Variances for some of the code deficiencies could be requested, but ultimately it is up to the local building official.
- Mr. Melnick stressed the need for a cost estimate for the "aggressive maintenance program" recommended in the structural report for the stands, if the stands are repairs. KBA will contact Mr. Brosnan for his input. It was noted that part of maintenance is ongoing monitoring of the structure.
- KBA to estimate loss of seats within the existing stands to accommodate the egress and ADA upgrades. Initial thoughts ranged between 250 – 300 seats.
- Mr. Merusi noted that testing for lead paint on the stands will be done by his Department to respond to Historic Commission question.
- Mr. Merusi stated that he will need the final phase description and cost estimate for Friday to prepare for Capitol Budget Committee presentation.
- Mr. Merusi stated that Phase 1 cannot exceed \$4mil.
- Mr. Merusi noted that for Phase 2 to be funded by the Townspeople, Phase 1 will have to be done well. Streetscape upgrades along Union Ave need to be well done.
- Mr. Merusi noted Master Plan should include some reference examples of other stadiums in MA. Dilboy Stadium should be one. Mr. McKeon to check for others.
- Mr. Melnick asked if construction of the Maintenance facility could be accelerated. Mr. McKeon noted that we may be able to shave a couple weeks off Mr. Melnick's schedule. Mr. Melnick noted that bidding may be able to be slightly compressed also.
- Mr. Merusi asked that a revised Draft Master Plan be developed for next Tuesdays Capitol Budget Committee meeting. KBA to bring boards of plans. KBA should stress ADA upgrades and code upgrades.
- Mr. Merusi will contact Town Building Commissioner to begin dialogue re: repair vs. replacement of stands. KBA to follow up with letter requesting code interpretation.
- Mr. Merusi informed the meeting attendees that the Town Meeting starts April 24 and there are 65 articles. The Capitol Budget article is No. 49. He expects the capitol budget article to come up around May 1, 2007.

Next meeting to be held April 11, 2007 at 9:00 am.

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# MEMORANDUM

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## **BOWDITCH FIELD MASTER PLAN**

Framingham, Massachusetts

KBA # 06030.00

Prepared by: Michael McKeon

Date: November 29, 2006

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### **NOTES;**

#### **Consultation with MA Plumbing Board of Appeals**

**Attendees:** Michael McKeon, KBA  
Dennis O'Leary, RDK  
Michael Melnick, Lincoln Consulting

A written explanation of our proposal (see below), along with packages of relevant materials (plans and photographs) were distributed to the Board and a dialog of about 20 minutes ensued beginning with a presentation of the case by Messrs O'Leary and McKeon.

Essentially the Board expressed concerns that past attendance figures cannot be used to accurately predict future usage of the facility by the Town or concurrence by the public given the "modernization" of the installation. While they recognized that Bowditch is essentially a high school-level competition facility, they feel that the Town's investment opens the door to increased usage of the stadium. Mr. McKeon pointed out to them that the severely limited on-site and adjacent parking capacity effectively precluded the kind of events that they, the Board, may be imagining. One retort was that "then the Town should reduce the capacity of the stadium to what can be supported by the parking levels. Mr. McKeon pointed out that a reduction below the 4,100 new seats currently proposed under Phase I would jeopardize the number of family members able to attend graduations. Some members of the Board also expressed their opinion that if they were willing to grant a variance (at a future hearing) reducing the fixture count requirements, the Owner could not count the existing public toilets in the lower level of the Parks and Recreation Building. When it was pointed out that these facilities were constructed for this use, remain operational, are accessible and are an integral part of how Bowditch is used by the public, the board relented and agreed that if the Owner could demonstrate proper accessibility and level of serviceability, these fixtures could be counted towards the total required.

**Conclusion:** The Board would look favorable upon a request for variance based on providing 50% of the required fixture count. They insisted that they felt that this was a "generous" concession which they have not granted previously.

#### **Written Proposal Presented:**

Bowditch Field Toilet Facilities Proposal  
MA Plumbing Board of Appeals  
Quincy, MA  
November 29, 2006

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# MEMORANDUM

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## BOWDITCH FIELD MASTER PLAN

Framingham, Massachusetts

KBA # 06030.00

Prepared by: Michael McKeon

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The Town of Framingham is in the process of masterplanning improvements to Bowditch Field, a WPA-built, town-run high school football/soccer stadium located on Union Street. The stadium currently has a capacity of 5,120 seats in three bleachers; Two identical concrete stands on the Home and Visitor sides and a metal and wood hand-me-down 500 seat bleacher behind the south end zone. Currently there are no permanent toilets immediately adjacent to the bleachers, but the following are available in the lower level (accessible) of the Parks & Recreation office building about 100 feet South-southwest;

Men: 3 wc's, 10 urinals, 2 lavatories  
Women: 7 wc's, 3 lavatories

There are separate toilets that serve the offices on the upper level. The town has provided portable toilets at some events in the past but the public tends to prefer to use the permanent facilities.

Although, the facility has a capacity of 5,120 spectators - and has actually printed up to 5,600 tickets for some events (High School graduations - the actual average paid attendance at events over the last decade has been closer to 10%-12% of that (See attached "Event Head Count" tabulation sheet provided by the Parks & Recreation Department.

After analyzing the attendance figures, gathering anecdotal operational data, observing the facility in use and discussing the realistic future use of the facility, we believe it makes sense to propose a plan that provides new seating for a total of 4, 100 in order to continue to accommodate the high school graduation attendance that Bowditch has historically served but, since this event is a short-duration, no-food-or-drink type of event, design toilet facilities based on the average attendance of all the other events. Actually we are proposing to provide toilet facilities based on an attendance of 1,000, which is about 50% higher than the actual average attendance. The number of fixtures proposed for public use is as follows;

Men: 4 wc's, 9 urinals, 5 lavatories  
Women: 17 wc's. 5 lavatories

In addition to these facilities there will be several dedicated toilet facilities for the team locker rooms, official's locker rooms and concession staff based on actual occupancies. The public toilets in the P&R bldg will continue to be available.

Michael J. McKeon, AIA of Kaestle Boos Associates, Inc.  
Principal Architect for the Master Plan

**STRUCTURAL EVALUATION**

**OF**

**Bowditch Field Grandstands**  
**Framingham, Massachusetts**

**FOR**

**The Town of Framingham**  
**Parks and Recreation Department**

October 15, 2004

By

Structural Integrity Engineering Group, Inc.  
11 Salem Street, Suite 2  
Medford, MA 02155

781-391-3022



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## APPENDIX

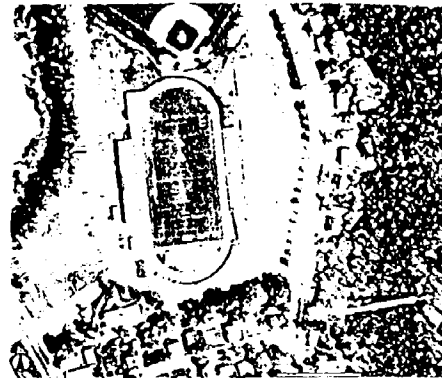
Cost Estimate for Grandstand Repair/Rehabilitation  
Cross-Sectional Sketch  
Plan Sketch  
East Grandstand Photographs  
West Grandstand Photographs



October 15, 2004

Mr. Christopher McGinty  
Town of Framingham Parks & Recreation Dept.  
475 Union Ave.  
Framingham, MA 01702

Regarding: Existing Concrete Grandstand Structures  
Bowditch Field, Framingham, Mass.



Dear Mr. McGinty:

I am writing to report to you the findings of my structural engineering investigation of the above-referenced facility. On October 4 and 5, 2004 I personally visited the site to make observations, measurements, and photographs of visible and accessible existing structural conditions in both the east and west concrete grandstands. At the time of my visit, no destructive explorations through concrete surfaces were made. The structure and its internal components were sufficiently exposed in enough places to permit direct observation and measurement of critical elements. Because of the time limits on this investigation, no physical or chemical testing of existing construction materials was possible. The findings herein are necessarily conditioned upon these limitations.

The purpose of this investigation is to determine the safety and continued serviceability of the existing concrete structure; to recommend repairs and improvements where the structure has deteriorated; and to prioritize these repairs and improvements into immediate, near-term, long-term, and recurring expenditures.

### General Description

The grandstand structures under study were originally built in 1935 by the Works Progress Administration. Both grandstands have overall dimensions of approximately 40 ft. by 235 ft. They are constructed of reinforced concrete. The two structures were originally almost identical. Each grandstand has fourteen rows of bleacher-type seats mounted directly on the concrete structure's top surface. Each row of seats is 13 inches above the one below. The grandstands are structured with rows of beams and columns occurring 13 ft. on center. There are two expansion joints built into each grandstand, where a double row of beams and columns happens 65 ft. from each end.

Over the years, improvements have been made to the West (home) grandstand with more frequency than to the East (visitors) side. In 1958 the underside of the West grandstand was enclosed with concrete block walls. At some point, an enclosed press box was added over the top three rows of seats of the same structure. Also, it appears that one stairway of the West grandstand was relocated from its original position. The bleacher seats on the West side are aluminum. Exposed reinforcing bars on the underside of this grandstand have been coated to prevent the spread of corrosion. What appear to be original construction joints (end points of daily concrete placements) are clearly visible from the underside of the structure.

The East grandstand has remained open beneath. Only chain-link fencing is used to control access to the underside. In addition, the East grandstand has suffered greater weathering at the top surface and

appears to have been given fewer repairs. The bleacher seats on this side are wood. This grandstand's bottom concrete surface appears to have been painted at least once. No construction joints are clearly visible in this structure.

The original construction documents were not available for review. Only a single drawing from the 1958 renovation of the West grandstand was retrieved from town records. Thus certain properties must be estimated, such as the ultimate compressive strength of the concrete and the ultimate tensile strength of the reinforcing bars, based on published historical records. Certain construction details for reinforced concrete do not (and would not be expected to) meet our present-day standards.

One example of such a detail is the thickness of concrete covering steel reinforcement. A number of bars are placed very close to the underside of the concrete, and thus would not have the amount of protection required for a modern concrete structure.

#### **Problems Noted by the Parks and Recreation Department**

The present condition of the facility has become a matter of concern for Parks and Recreation Dept. officials. According to the information provided to us, the expansion joints leak profusely. Other cracks in the structures also allow water to pass through, in some places leaving white efflorescence stains. The top surfaces of the concrete have required repeated repair, in one case extending the full thickness of the original concrete. Exterior finishes of the West Grandstand appear to be distorted and detached. There is a section of the wall above the top row of seats in the West Grandstand that is slightly, but visibly, tilted out of plumb. The undersides of both grandstands show substantial numbers of exposed reinforcing bars.

#### **Standards Used for Evaluation**

Reference documents used in support of the observations and findings herein include the following:

*Massachusetts State Building Code, 6 ed.* (780 CMR) Code of Massachusetts Regulations  
*Architectural Access Standards* (521CMR) Code of Massachusetts Regulations  
*Building Code Requirements for Structural Concrete ACI 318-99* American Concrete Institute  
*Concrete Repair Manual 1999* International Concrete Repair Institute  
*Structural Renovation of Buildings: Methods Details and Design Examples*, by Alexander Newman  
*Reinforced Concrete Design Handbook* American Concrete Institute, 1939  
*Structural Analysis of Historic Buildings* by J. Stanley Rabun  
*Architects' and Builders' Handbook, 18 ed.* by Kidder and Parker, 1935  
*Seismic Evaluation and Rehabilitation for Buildings* (TI 809-05) 1999, US Army Corps of Engineers  
*Joint Sealing for Buildings* (TM 5-805-6) U.S. Army Corps of Engineers  
*Building Construction Cost Data, 62 ed.* 2004 RS Means Co.

Based on these sources of information, the following design loads are being used:

Unit Weight of Concrete	150 pcf
Uniform Snow Load	35 psf
Uniform Live Load- Grandstands	100 psf
Railing load-uniform	100 plf in any direction

Railing load-concentrated

300 lb. in any direction

In addition, the following minimum material properties are being used:

Ultimate Compressive Strength of Concrete	2500 psi
Yield Strength of Steel Bars	30,000 psi

### Field Observations

The structural engineering investigation involved visual review of the interior and exterior of the facility for cracks, surface quality, and staining; acoustic sounding of the horizontal concrete surfaces by dragging a heavy steel chain over them; direct measurement of concrete and reinforcing steel; and spot chemical testing using phenolphthalein solution. This test is used to determine the alkalinity of existing concrete in place. (Over the course of many years, carbon dioxide in the air degrades this alkalinity so that concrete no longer has a naturally protective chemical composition. This carbonation process occurs to all concrete but progresses very slowly inward from the surfaces exposed to air.) Sketches of the grandstand plans were made in the field to permit mapping of observed defects.

Foundations of the grandstands are below grade and not accessible to view. However the defects noted in the concrete structure do not appear to be associated with settlement or other types of foundation problems. The ground surfaces beneath the grandstands is unpaved in all but a few small locations near overhead doors in the West structure.

### *Observations at the East Grandstand*

The top surface of the grandstand structure is severely weathered. Hairline cracking across the steps of the seating areas has occurred at approximately 2-3 ft. on center. A number of seating locations have spalled and delaminated concrete. On the vertical faces of the seating platforms, there are a few areas having significant horizontal cracking and deterioration. The lower horizontal slab shows significant deterioration, particularly at railing sleeves and the exterior edge.

Sealant in the two expansion joints is failed. In most locations the sealant is detached from one side of the joint and in some it is completely detached. A compressible filler material had originally been placed between the two beams on each side of the joint. This filler is falling out in some places, but it also appears to be a fibrous material that can absorb water. The top-surface sides of the expansion joints are generally in sound condition, but a few locations have suffered spalling and local cracking.

The steel pipe railings on the side edges have left prominent rust stains on the surfaces below. The railings at the front of the grandstand have sleeves set in broken or deteriorated concrete. Neither the side nor the front balustrades conform to present-day standards for safety. The front guard rails are only 36" high and have a single horizontal intermediate rail at half height between vertical posts 68" on center. Side balustrades have similar wide spacing. A two-rail balustrade is permitted at the front, where the difference between grade and the walking surface is only 30". But the railing along the sides of the grandstand must prevent small children from being able to go through it, and the existing balustrades do not conform to this requirement.

Observations of the underside showed there to be a large number of exposed reinforcing bars at the bottom of the slab and beams. None of the bars was painted or otherwise protected after exposure. In a large number of bays the light reinforcing wires at the bottom of the slab were clearly visible. Small stalactites of precipitated salts had formed at one deteriorated slab location. Numerous beams had exposed bottom reinforcement where concrete cover had fractured off when the steel corroded. These deteriorated beams are generally found at the rear exterior of the grandstand as well as at the side exterior and were worst at expansion joint locations.

When hit with a hammer, a few beams lost chunks of their side cover. Similarly, exposed bars at the bottom corners of slab steps readily dropped small pieces of concrete. This sounding was done within reach of ground level. But there were beams and slabs much higher where deterioration is evident and falling concrete could be a significant hazard.

The full sections of columns were in tact, but sounding with a hammer near some of the expansion joints and deteriorated beams revealed that some delamination of concrete cover over the reinforcing bars had occurred. Columns at expansion joints and exterior conditions, like the beams, were generally worse off.

The wall behind the uppermost row of seating has a few horizontal cracks that show through the painted exterior surface. The depth of these cracks is not known, but they are clearly visible from ground level and occur near the bottom of the wall, at the top of a supporting beam. Such a location and orientation is troubling because it suggests weakness at the base of the wall where stresses from wind and leaning spectators are greatest.

#### *Observations at the West Grandstand*

The West Grandstand is better maintained in several respects. First, fewer large and obvious defects occur in the top surface. Second, the underside of the structure is enclosed and protected from weather. Third, improvements have been made to the seating areas and railings. Fourth, exposed bars at the underside of the structure have been coated to avoid further corrosion.

While not as widespread, there is a high degree of weathering in a few locations, particularly stairs. Aggregate in the concrete is exposed and projecting in these places. There also appears to be more hairline cracking across the seating platforms, closely spaced every 2 or 3 feet. In addition to the expansion joints 65 ft. from each end, there are clearly discernible construction joints in the concrete work. These joints appear to have been patched on the top surface with a cementitious material.

Patches in the concrete of the top surface are better bonded to the underlying substrates than in the other grandstand. Acoustic sounding did reveal some patches that were delaminated, particularly at the bottom levels of the grandstand.

The balustrades at each side of the grandstand are newer and have smaller openings between pipe rails. The posts are not set in sleeves but are bolted to the concrete through saddle-type connections that slip over the top of the concrete wall alongside the stairs. Nevertheless, the topmost sections of balustrade where closely spaced horizontal pipes are used clearly violate the code because they create a "ladder effect." The front balustrade has 1 ½ inch pipe rails and posts spaced at 68" on center.



The rear wall of the seating area has one troubling condition at an expansion joint where one side is obviously tilted and damaged near the top.

At the underside of the slab, a large number of exposed reinforcing bars can be seen at the bottom of slabs and beams. Here, though, the exposed bars have been locally painted with a coating of unknown type, presumably to inhibit the spread of corrosion. The rooms underneath the grandstand are divided by concrete block walls. There is no paint on the concrete or masonry at the interior of these rooms.

Some defects in the original construction can be seen in the concrete work. There are areas of honeycombing where concrete was not vibrated into contact with the forms.

The Town added masonry exterior walls, interior partitions, and exterior finishes to the West Grandstand about 1958. According to the drawings these walls were anchored to the concrete frame, but are otherwise unreinforced. No guardrails or bollards are present to protect against vehicular impact. Many trucks and pieces of equipment are presently stored in this area. In addition, drums of oil and bags of chemical fertilizers are kept here, with potential to be spilled directly into the soil.

The cement stucco finishes show evidence of detachment from the underlying structure. One heavy piece of cement stucco has partially broken loose directly above an overhead door. Other locations show evidence of buckling in the face of the stucco finish.

## Structural Analysis

### *Quantitative Analysis*

The original concrete structures were designed by a somewhat more conservative method of calculation than we presently use in reinforced concrete design today. Engineering handbooks from the 1930s indicate that the same 100 psf superimposed load required today by the Massachusetts State Building Code should have been used at the time the grandstands were constructed.

Allowing for reasonable assumptions about the strength of materials used in the construction of the facility, it has been determined that the original structural design would have properly and safely supported the weight of the structure in addition to the superimposed loading of 100 psf in the grandstands.

We find that the stepped slabs, the girders, and the columns all adequately serve their intended original purposes provided that they were properly constructed and maintained. We also find that wind forces are adequately resisted by the existing structural frame.

Analysis of railings suggests that, in addition to their architectural design shortcomings, they do not conform to present-day requirements of resistance to a 100 plf uniform load or 300 lb. concentrated load. While the horizontal rails appear to be sufficient, the vertical posts are seriously over stressed at the required loading.

Needless to say, deterioration of structural elements in all parts of the structure will result in a degradation of load capacity. A certain small amount of deterioration, construction error, and periodic overloading is accommodated in both the required loadings and the factors of safety used in the original

design. It is extremely difficult to place a reliable number on the percentage of degradation of structural load capacity for the entire facility. However, it stands to reason that a 1% change in the area of steel reinforcement or compressive strength of the concrete would result in a 1% reduction of total strength. If the structure was originally built to exactly support 100 psf, with no reserve, then corroded reinforcing bars would cause the following pattern of reduction in load capacity.

Loss of steel area	Resulting allowable live load
0%	100 psf
5 %	92 psf
10%	84 psf
15%	76 psf
20%	68 psf
25%	60 psf

As time goes by without remedial action, critical members will lose more steel if a corrosive environment is present. The rate at which this occurs is difficult to estimate. But if reinforcing bars which are already corroded continue to lose one or two percent of their cross-sectional area every year, it is clear that those parts of the structures will not be safe for large crowds of people within the next 10 years.

#### *Qualitative Analysis*

Consideration of qualitative principles of the integrity of a structure traditionally includes review of the following:

1. Configuration of framing (Logical and systematic layout and use of materials)
2. Continuity of structural elements (Direct load paths and proper connection of all parts)
3. Redundancy of structural support (Local failures should not cause general collapse)
4. Avoidance of sudden failure of elements (Things should bend before they break)

The configuration of the grandstands is appropriate to a structure being used to support large crowds of people. The "sawtooth" profile of the slabs, although thin in cross section, offers inherent rigidity. The concrete provides excellent damping of vibrations. The columns are braced to one another where their height approaches two stories. Each grandstand is in fact three independent structures, separated by expansion joints. Even with all cracks, joints, and holes filled, there is little chance of large amounts of water ponding on the structure.

Structural continuity is achieved through the monolithic nature of concrete construction. The large loading surface slopes toward and rests on the front wall. This allows wind and other lateral loads to be transferred to the foundation through a direct path. Gravity loads are transmitted to foundations through beams and columns at rather close spacing. While it is impossible to see every reinforcement condition, the exposed bars observed suggest that adjacent concrete placements are secured to one another. Structures of this age do not generally contain the types of reinforcing details that promote good performance during an earthquake or accidental loss of a support, but nothing flagrantly hazardous was identified. All beams appear to have stirrups and all columns appear to have ties around the main reinforcing bars.

Redundancy of the structural framework is excellent at the West Grandstand where masonry infill

walls have been introduced between beams and columns of the rear side. The 13 ft. spacing of beams and columns in both grandstands makes a general collapse unlikely, in spite of construction defects and deterioration over the years. Where structural deficiencies presently exist, they are largely visible and identifiable. Distortions are limited to relatively small areas of known deterioration, and have not resulted in systemic failures. Where reinforcing steel is exposed, loss of steel section has not progressed beyond surface rust in most cases. The parapet wall at the back of the top row of seating could provide a "bridge" over an accidentally failed column at the rear of the East Grandstand, but that depends heavily on reinforcement details inside the concrete but presently unknown to us.

The chance of brittle or sudden failure can be brought about by inadequate amounts of reinforcing in concrete. In the 1930's minimum amounts of steel reinforcement were not specified by codes. Consequently, some parts of the structure are very lightly reinforced compared to present standards. Sudden failure can also occur as a result of buckling in columns or improper anchorage of reinforcing in beams. Buckling of columns would be most likely at the East Grandstand during a strong lateral earthquake loading that runs parallel to the stands. It is most unlikely that the columns and beam intersections at this location could absorb the many repeated reversals of stress that would occur in such an event.

### Evaluation

The East Grandstand represents a formidable repair task. Substantial amounts of labor-intensive work must be done to both the top and bottom surfaces of slabs, the beams, and some of the columns. Deterioration of this structure is severe in some places. Even the moderate deterioration is widespread, affecting nearly every type of structural element. On the top surface, the deterioration is the result of weathering. On the bottom surface, the deterioration is the result of rusting steel. As steel rusts, it becomes larger in volume and imparts an outward force against the concrete surrounding it. This results in fracture of the concrete cover and often promotes a downward spiral of more deterioration.

The West Grandstand is in better condition, but the work to repair it is quite comparable to its counterpart on the East side of the field. This is because of the large amount of corroded and exposed steel reinforcing at the underside of both grandstand slabs and beams. The West Grandstand has the added feature of masonry walls filling in the spaces between beams and columns on the exterior face. While this arrangement has its benefits, the presence of equipment and vehicles which could accidentally bump the masonry walls makes toppling of the masonry a possible safety hazard.

A potentially serious hazard exists at the parapet walls at the top of the grandstands. Distress in the beams supporting these walls has been observed and its details of reinforcement are not known. Spectators should be kept away from parapet walls to avoid large numbers of people leaning against it. A failure of the parapet would result in both loss of protection for spectators at the top of the grandstand, and also a very heavy piece of concrete would fall 20 ft. to the ground below.

It is indeed possible to save and preserve the grandstand structures so that they will continue to accommodate spectators at sporting events into the foreseeable future. But this will require not only a large expenditure of money for repair, but also maintenance expenditures every year to keep the facility in sound physical condition.

**Strategy for Repairing and Maintaining the Grandstand Structures**

The overall strategy we recommend for dealing with the condition of the grandstand slab includes the following basic principles:

1. Keep the water out of the concrete, by sealing cracks, sealing joints, and applying paint or water repellents to exterior concrete surfaces.
2. Repair/replace and patch areas of concrete and steel reinforcement which are presently unsound.
3. Use corrosion-inhibiting repair products to arrest deterioration and protect the structure.
4. Employ aggressive and systematic maintenance procedures to keep the grandstands in continual good repair.

**Repair and Maintenance Recommendations***1. Keep the Water Out*

- Remove the existing failed sealants and fillers from the expansion joints, add new backer rod, and fill with a flexible sealant to allow 1/2" of movement across top of the joint.
- Rout the top of construction joints and larger cracks to a constant 1/4" width, and fill with a flexible sealant adhered to the sides.
- Apply a surface leveling/pore filling cementitious compound to weathered concrete top surfaces that are otherwise sound.
- After a light sandblast surface prep, apply two coats of a clear water repellent to all top surfaces keep running water from soaking into the concrete.

*2. Repair/Replace and Patch Areas of Unsound Concrete*

- Unsound concrete areas at the top side should be removed to sound concrete by sawcutting square edged-areas and chipping with light jackhammers. Where the entire thickness of concrete is lost, flat formwork should be placed against the underside of slab openings.
- Loose and fractured concrete at the bottom of slabs and beams should be broken off to sound concrete, so that reinforcing is fully exposed. Temporary shoring may have to be used under some beams in such a condition.
- Steel reinforcing should be cleaned by abrasive or mechanical means. Where significant loss of cross section is evident, new steel bars should be added. Old and new steel bars should be painted with a corrosion-inhibiting rebar coating. Old concrete should be prepared with a corrosion-inhibiting bonding agent.

- Horizontal surfaces can be repaired from the top side by placing new concrete in patch openings. Vertical surfaces can be repaired by forming and pouring, or by hand placement of trowel-grade repair mortar. Overhead surfaces can be restored using shotcrete (also known as gunite) in areas not exposed to weather, and by hand patching with trowel-grade repair mortar at beams and columns requiring weather resistance. This technique can also be used at slab areas with low headroom clearance beneath.

3. *Use Corrosion-Inhibiting Chemicals to Arrest Deterioration and Protect the Structure*

- Products used should in general be of the same manufacturer or of known chemical compatibility with one another. Manufacturers such as Sika or Degussa offer extensive technical information about their products.
- A topically applied migrating corrosion inhibitor coating should be sprayed on the exposed surfaces of all concrete slabs, beams, and columns beneath the grandstand. This chemical will penetrate the concrete and attach itself to steel reinforcing, preventing the continuation of corrosive processes. Such products have not been in service for a great length of time, and their effectiveness is not well known, but they are not known to do any harm. If successful, this kind of application can be of immense long-term benefit to the structure.
- Repair mortar, patching compounds, and bonding agents all can be purchased which contain this type of corrosion inhibiting chemical. The benefit of these products is that the corrosion resistance travels beyond the boundaries of the patch and into surrounding concrete.

4. *Employ Aggressive and Systematic Maintenance Procedures to Keep the Grandstands in Good Repair.*

- Under no circumstances should chloride de-icing chemicals of any kind be used on the structures in winter conditions. Alternative non-chloride, non-corroding de-icers are available. One common alternative is calcium magnesium acetate.
- Care should be taken to use snow and ice removal tools that will not cause damage to the sealants in the expansion joints.
- An annual wash-down of the top surfaces of the grandstands should be done to remove all de-icing chemicals, soft drink spills, dirt, bird droppings, salt blown onto the structure from nearby roads, and debris.
- Water repellents must be re-applied every three to five years.
- The maintenance staff should keep on hand small amounts of coating, sealant, and repair materials to assure that minor accidental damage and wear on the structure is quickly corrected.



**Regulatory Thresholds Potentially Triggered by Renovations**

In two important ways, efforts to restore, alter, or renovate the existing grandstand structures may initiate larger and more comprehensive improvements. First, the Massachusetts Architectural Access Board and Americans with Disability Act Guidelines would require accessibility improvements for the disabled. Second, article 34 of the Massachusetts State Building Code requires mitigation of seismic hazards based on the value of renovations in comparison to the assessed value of the structure.

It is quite evident that neither access for the disabled nor seismic design of the structure were considered in public facilities constructed in the 1930s. Improving these conditions is not an easy or inexpensive thing to do, given that reinforced concrete is the primary construction material.

Future additions or renovations that would add weight to the structure or that would increase the number of spectators in the stands would in our opinion be unwise in view of these regulatory thresholds.

**Estimated Cost of Recommended Repairs**

The best way to find out the cost of structural repairs is to consult one or more contractors. Because Structural Integrity Engineering Group, Inc. does not purchase materials or hire construction labor, and we are not professional cost estimators, any range of estimated cost we develop must be considered "ballpark" figures for reference only. They are based on published information in industry-standard cost indices, and consultations with construction materials suppliers.

Based on our analysis we believe the cost of structural recommendations noted above will most likely be about \$490,000.00 for the West Grandstand, and about \$635,000.00 for the East Grandstand. The most expensive part of the work is the overhead repair required underneath the grandstand, which represents roughly 50% of the estimated cost. In the appendix is a detailed breakdown of this estimate.

**Prioritization of Structural Repairs and Improvements**

Level of Urgency	West Grandstand	East Grandstand
<i>Immediately</i>	<ul style="list-style-type: none"> <li>• Remove detached stucco from exterior walls</li> <li>• Restrict access around parapet walls</li> </ul>	<ul style="list-style-type: none"> <li>• Restrict access to deficient slab areas</li> <li>• Restrict access around parapet walls</li> <li>• Lower the number of seats in the stands</li> </ul>
<i>Short-Term</i>	<ul style="list-style-type: none"> <li>• Seal expansion joints</li> <li>• Repair deteriorated concrete</li> <li>• New front railings</li> <li>• Replace entry/exit steps at ends</li> </ul>	<ul style="list-style-type: none"> <li>• Seal expansion joints</li> <li>• Repair/reconstruct deteriorated concrete</li> <li>• New front and side railings</li> <li>• Replace entry/exist steps at ends</li> </ul>

<i>Near-Term</i>	<ul style="list-style-type: none"> <li>• Add floor slab under stands</li> <li>• Add guard rails or bollards at masonry walls</li> <li>• Repair stucco exterior finish</li> </ul>	
<i>Long-Term</i>		<ul style="list-style-type: none"> <li>• Add floor slab under stands</li> </ul>
<i>Recurring</i>	<ul style="list-style-type: none"> <li>• Annual wash-down</li> <li>• Re-apply water repellent</li> <li>• Paint exposed metal</li> <li>• Apply only non-corrosive de-icing chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Annual wash-down</li> <li>• Re-apply water repellent</li> <li>• Paint exposed metal</li> <li>• Apply only non-corrosive de-icing chemicals</li> </ul>

### Recommendations on Architectural and Construction Issues

For such matters as ADA improvements, crowd control, dimensional and seating arrangements, the services of a Registered Architect are recommended. It would be wise for the Town to authorize a set of Contract Documents if this renovation is to be pursued. These documents would provide detailed construction information for all aspects of the project, and would also serve as the basis for field supervision and contract administration. In addition, the need for laboratory testing of old and new materials, as well as inspection of work in progress may suggest the services of a qualified testing agency.

### Concluding Remarks

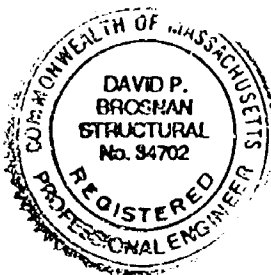
Please accept my sincere personal thanks for choosing Structural Integrity Engineering Group to assist the Town of Framingham in this matter. Should you have any questions or comments about this report, do not hesitate to contact me directly. If the Town should require engineering services to prepare structural construction documents for this renovation, we will be pleased to submit a proposal at your request.

Very truly yours,

STRUCTURAL INTEGRITY  
ENGINEERING GROUP, INC.

*David P. Brosnan*

David P. Brosnan, P.E.  
President



## Bowditch Field Grandstands, Framlingham, Mass.

## Appendix C

## Cost Estimates for Grandstand Repair/Rehabilitation

ITEM	UNIT PRICE	UNIT	WEST GRANDSTAND		EAST GRANDSTAND	
			Quantity	Subtotal	Quantity	Subtotal
TOP SURFACE CONCRETE REPAIRS						
Deep concrete patch/reconstruction	\$25.00	SF	500	\$12,500.00	1,500	\$37,500.00
Shallow concrete patch < 1"	\$18.00	SF	1,500	\$27,000.00	2,000	\$36,000.00
Concrete surface leveler/pore filler	\$12.00	SF	1,600	\$19,200.00	7,000	\$84,000.00
Seal expansion joints	\$14.00	LF	130	\$1,820.00	130	\$1,820.00
Rout and seal construction joints	\$8.00	LF	200	\$1,600.00	200	\$1,600.00
Spray on water repellent coating	\$0.70	SF	15,000	\$10,500.00	15,000	\$10,500.00
UNDERSIDE CONCRETE REPAIRS						
Surface prep & shotcrete above 6'	\$60.00	SF	2,000	\$120,000.00	2,000	\$120,000.00
Surface prep & hand patch below 6'	\$85.00	SF	1,400	\$119,000.00	1,600	\$136,000.00
Beam & column repairs at any height	\$85.00	SF	372	\$31,620.00	610	\$51,850.00
Spray on migrating corrosion inhibitor	\$1.00	SF	15,000	\$15,000.00	15,000	\$15,000.00
BALUSTRADES						
Replace front rails	\$32.00	LF	245	\$7,840.00	245	\$7,840.00
Replace side rails	\$75.00	LF	20	\$1,500.00	80	\$6,000.00
GROUND FLOOR						
Ground floor paving slab 4" concrete	\$2.15	SF	8,500	\$18,275.00	9,500	\$20,425.00
Bumper rails at masonry walls	\$27.50	LF	400	\$11,000.00	0	\$0.00
Bollards at overhead doors	\$275.00	EACH	12	\$3,300.00	4	\$1,100.00
EXTERIOR WALLS						
Remove/Replace defective stucco	\$4.50	SF	550	\$2,475.00	0	\$0.00
Paint exterior side only	\$0.81	SF	6,000	\$4,875.00	0	\$0.00
SUBTOTAL				\$407,505.00	\$529,635.00	
Contingency	10%			\$40,750.50	\$52,963.50	
General conditons, overhead, & profit	10%			\$40,750.50	\$52,963.50	
GRAND TOTAL				\$489,006.00	\$635,562.00	
LOW END OF RANGE		87.50%	\$427,880.25		\$556,116.75	
HIGH END OF RANGE		112.50%	\$550,131.75		\$715,007.25	

**STRUCTURAL INTEGRITY  
ENGINEERING GROUP, INC.**

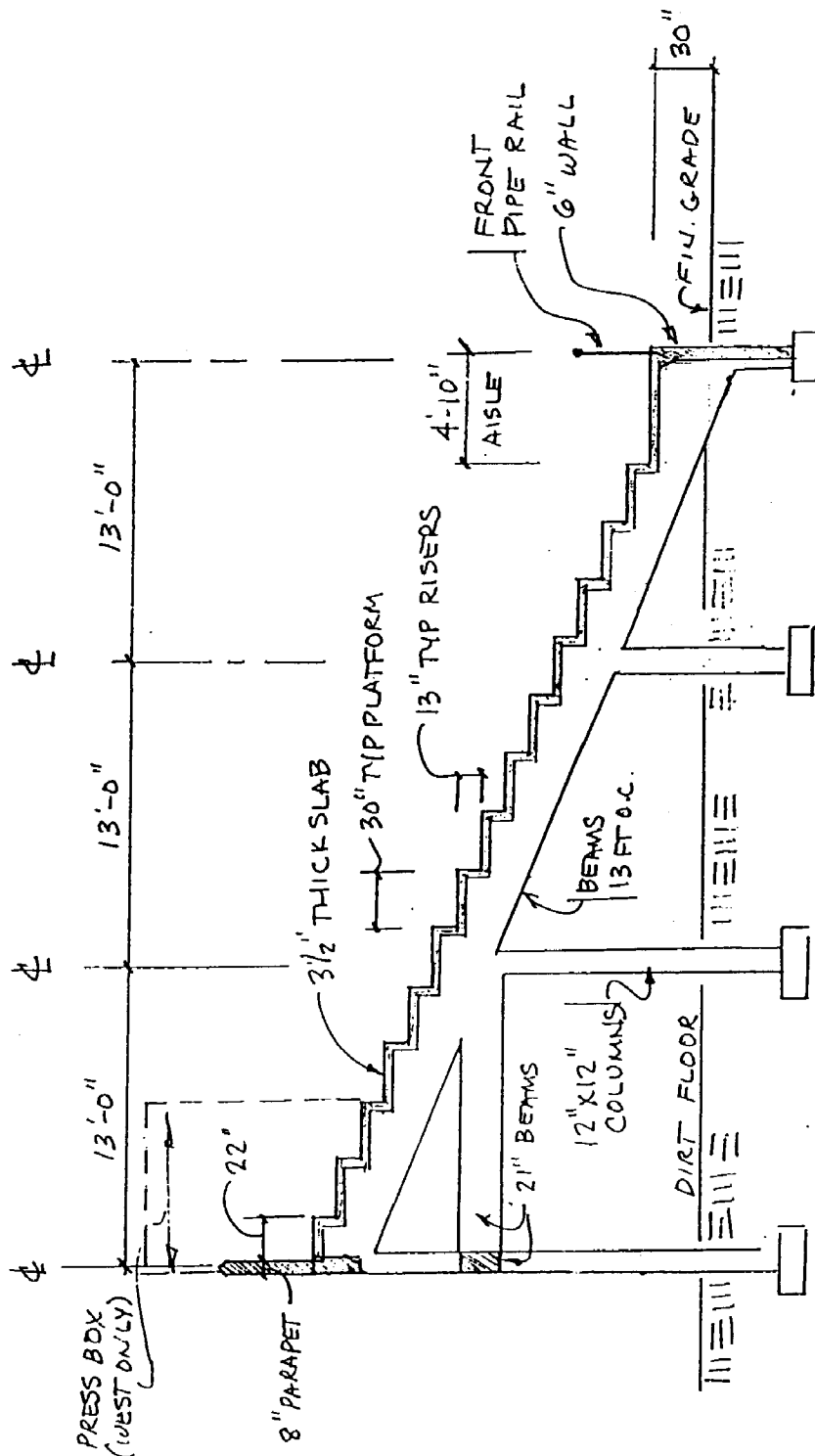
JOB BOWDITCH FIELD FRAMING TANK **Appendix C**

SHEET NO. SK-1 OF       

CALCULATED BY DPB DATE 10-15-04

CHECKED BY        DATE       

SCALE       



CROSS SECTION THROUGH GRANDSTAND  
1/8" = 1'-0"

**STRUCTURAL INTEGRITY  
ENGINEERING GROUP, INC.**

JOB BOWDITCH FIELD FRAMINGHAM **Appendix C**

SHEET NO. SK-2

OF

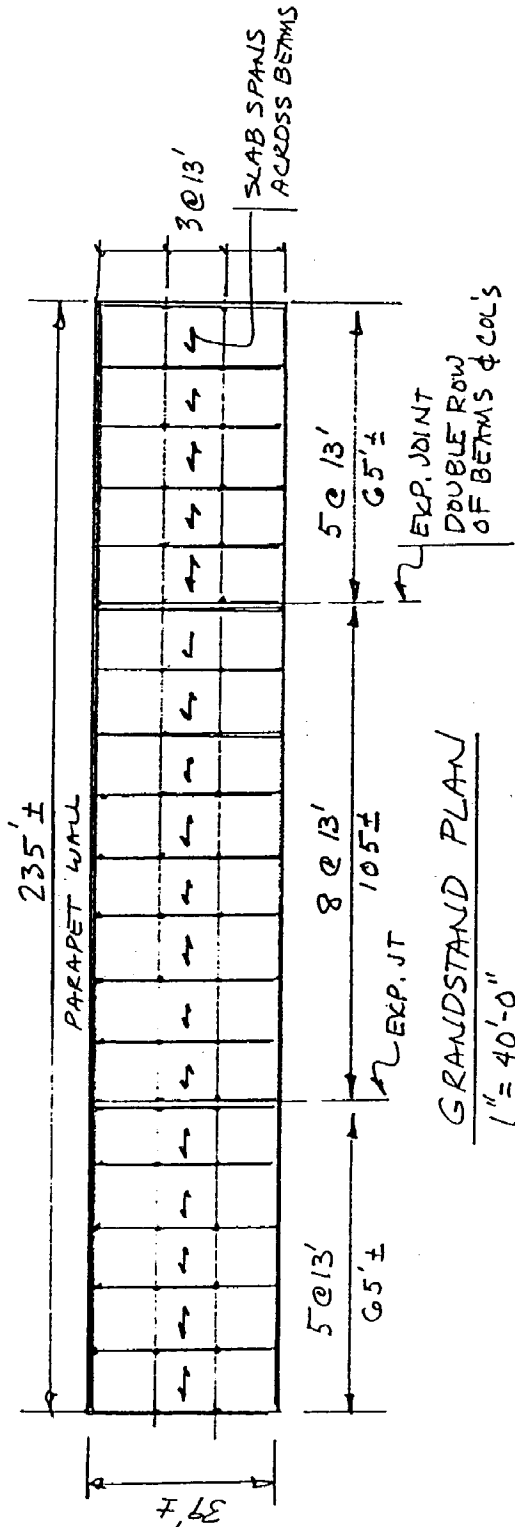
CALCULATED BY DPB

DATE 10-15-04

CHECKED BY

DATE

SCALE







# JOSEPH P. KEEFE TECHNICAL SCHOOL

750 Winter Street • Framingham, MA 01702 • 508-416-2100 • Fax 508-416-2342

Appendix D

PETER D. DEWAR  
*Superintendent/Director*

KARL D. LORD  
*Assistant Superintendent/Principal*

April 25, 2007

Mr. Robert L. Merusi  
Framingham Parks & Recreation  
Bowditch Field  
475 Union Avenue  
Framingham, MA 01702

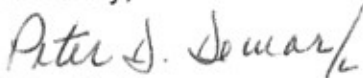
Dear Mr. Merusi,

I would like to express my support for moving the Park and Recreation Maintenance Operations next to Keefe Technical High School as proposed in the Bowditch Field Master Plan.

The Park and Recreation Department and Keefe Technical School have a long history of working together in mutually beneficial ways. The Park and Recreation Department takes full advantage of our plumbing, electrical, graphic arts, metals, culinary, and other shops, on a regular basis. The types of projects they provide our school consistently satisfy our educational needs.

Locating the Park Maintenance Facility next to our building will enhance this relationship and significantly increase communications and access between the Horticultural Department and the Town's Park Maintenance Operations. This is a unique opportunity for this school.

Sincerely,



Peter D. Dewar  
Superintendent/Director





# Appendix E

TOWN OF FRAMINGHAM - PARKS AND RECREATION DEPARTMENT MAINTENANCE OPERATIONS VEHICLE INVENTORY									
New #	Old #	PLATE	YEAR	MANUFACTURER	DESCRIPTION	VEHICLE ID	STICKER MONTH	Note	Vehicle Length
900	1	M70598	2004	FORD	4WD UTILITY	1FMD034X9RUC86995	8	Director's Vehicle	
901	Rink	M51142	1994	FORD	4 WD UTILITY	1FMD034X9RUC86995	3	Used at bowditch april-Sept.	
902	3	M56883	1998	FORD	4 DOOR SEDAN	1FAFP52UXWA120836	3	To be stored at Bowditch	
903	1	M61279	2000	FORD	2WD F250 Pick UP	1FTNF20L2YEA39309	12		21 ft
904	2	M56928	1997	DODGE	4WD DUMP TRUCK	1B6MF36D1VJ531080	3		24 ft
905	3	M63593	2001	FORD	4WD PICKUP	1FTSF31F41EA27122	3		21 ft
906	4	M74283	2006	FORD	4WD PICKUP	1FTSX21P36EB19166	11	Operations Manager's	21 ft.
907	5	M57148	2001	FORD	4WD PICKUP	1FTNX21F71EA27121	12		25 ft.
908	6	M56384	1999	FORD	PACKER	1FDXE46FZXE53641	3		25 ft
909	7	M24873	1990	FORD	F800 DUMP TRUCK	1FDNF60H5LVA01242	3		25 ft
	8	M52946	1997	DODGE	4WD STAKE BODY	1BGMF36DXVJ542370	3		24 ft
910	10	M70739	2005	FORD	F750 J HOOK	3FRFX75G85V138673	7		26 ft.
911	11	M74654	2006	FORD	F450 CREW DUMP	1FDXW47P76EC23361	4		25' ft
912	12	M75042	2007	FORD	F 450 DUMP	1FDXF47P97EA84643	9		25' ft
913	13	M61283	2000	FORD	4WD DUAL CAB	1FTSW31F3YEA48005	3		24 ft.
914	14	M61282	2000	FORD	DUAL CAB DUMP	1FDXW47F7YEA34977	3		25 ft.
915	15	M53625	1997	DODGE	4WD PICKUP	1B7KF26DXVJ524559	3		21 ft
916	16	M68499	2000	FORD	2WD STAKE BODY	1FDAF56FXYYEO6731	12		24 ft.
917	17	M57814	1997	FORD	2WD PICKUP	1FTH25H4VEC42263	12		21 ft.
918	18	M42660	1988	Chevy	C600 Rack	2FTJW36H9KCA63793	3		
919									
920	20	M61889	1999	JOHN DEERE	TRACTOR	LV54105243056	3		19 ft.
921	21	M74282	2005	CASE	MXT 570	JJG 0302753	11		20 ft.
922	22	M53522	1997	KUBOTA	TRACTOR	L7200D56585	3		
923	23			NEW HOLLAND	SKID STEER	L455			
924	24	M61890	1999	JACOBSEN	GANG MOWER	HR9016899J311	3	To be stored at Bowditch	
925	25	M15937	1986	JACOBSEN	GANG MOWER	170120520	3	To be stored at Loring	
926	26	M70596	2005	GIANT VAC	LEAF VAC	41158033			
927	27		1980	KUBOTA	TRACTOR	B7200			
928	28	M64964	2001	BRUSH BANDIT	CHIPPER	001234			
929	29	M36705	1986	STONE	1 1/4 TON ROLLER	SR2500SW5161483			
930	30	M37919	1987	OLATHE	SWEEPER	650282			
932	32	M61253	1999	UTILITY	12' TRAILER	4K8AX1212X1A44949			
933	33	M61275	1999	UTILITY	10' TRAILER	4K8AX1010X1A40496			
934	34	M61297	1998	UTILITY	18' TRAILER	431FS1820W100417			
935	35	M37905	1986	CROWN UTILITY	16' FLAT BED	70001606040 860298			
936	36	M12408	1985	BOBCAT	10' UTILITY TRAILER				
			2006	KUBOTA	TRACTOR L4630GS	34308			